

**PRODUCTION SHARING: USE OF U.S.
COMPONENTS AND MATERIALS IN
FOREIGN ASSEMBLY OPERATIONS, 1995-1998**



**USITC PUBLICATION 3265
DECEMBER 1999**

INVESTIGATION NO. 332-237

United States International Trade Commission, Washington, DC 20436

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Production Sharing: Use of U.S. Components and Materials in Foreign Assembly Operations, 1995-1998



Publication 3265
Second Printing

December 1999

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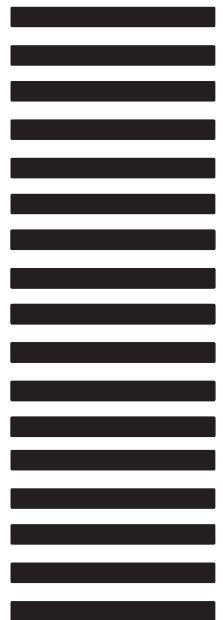
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ABSTRACT

This report series provides an annual summary of developments related to the use of U.S.-made components in foreign assembly plants. It also examines why such production-sharing operations have become an integral part of global efforts to reduce manufacturing costs and have contributed to the accelerated pace of cross-border integration of manufacturing in North America and the Caribbean Basin. The current report uses official U.S. import statistics, supplemented with various other information, to examine the use of North American assembly plants as part of a strategy to reduce manufacturing costs or to improve access to North American and global markets, focusing on developments in 1998. The report also highlights the evolution of assembly plants in Mexico into higher value-added manufacturing operations, as well as the trend toward the integration and rationalization of production facilities throughout North America and the Caribbean Basin.

Imports that incorporate U.S.-made components can enter the United States either free of duty or at reduced duties under the production-sharing provisions (9802.00.60-.90) of Chapter 98 of the Harmonized Tariff Schedule (HTS). However, a significant and growing portion of imports from production-sharing operations does not enter under these Chapter 98 provisions because the goods are already eligible for duty-free treatment under other agreements or tariff-preference programs. Therefore, official U.S. statistics are increasingly unable to quantify the magnitude and scope of production-sharing activity with complete accuracy.

The Commission's report assessing trade under the production-sharing provisions currently is the only U.S. source of data for documenting the use of U.S. components in foreign assembly. Where possible, this report characterizes the extent and type of production-sharing trade that takes place beyond that reported under the Chapter 98 production-sharing provisions. The official reported value of products entered under these provisions fell by \$5.1 billion (6 percent) to \$74.1 billion in 1998. The value of U.S.-made components incorporated in imports from Mexico reported under the production-sharing provisions of HTS Chapter 98 in 1998 amounted to \$14.5 billion, or 57 percent of the U.S. content in imports under these provisions from all sources that year (\$25.2 billion).

This year's report focuses on regional developments in North America and the Caribbean Basin region and highlights activities in selected industry sectors -- motor vehicles and auto parts, color television receivers, and apparel.

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CHAPTER 1

OVERVIEW

Rationalization of production¹ through investment in production-sharing² operations is one of various strategies employed by industry to reduce costs or to achieve other competitive advantages in U.S. and third-country markets. U.S. firms have traditionally retained product development and design, capital-intensive manufacturing, and marketing-related activities in the United States, while shifting labor-intensive operations to countries with lower labor costs.³ Some firms have also penetrated foreign markets by establishing local assembly operations when trade barriers or high transportation costs inhibit direct exports of finished products from the United States. In general, production sharing increases interdependency among plants by requiring tight coordination between assembly plants and suppliers of components, materials, and transportation services.

Low-cost foreign assembly often enables companies to enhance competitiveness.⁴ This “foreign assembly” type of production sharing is an important competitive strategy for many U.S. producers of goods requiring labor-intensive manufacturing processes. Companies based in the European Union (EU) take advantage of special tariff provisions that allow duty-free entry of goods processed outside the EU from EU-origin components and materials. Most EU production sharing involves apparel, auto parts, and electronic products assembled in Central Europe, mainly in the Czech Republic, Hungary, Poland, and Slovenia.⁵ Companies based in Japan, Korea, and

¹ The term “rationalization of production” as used in this report refers to a series of production processes at different locations that take advantage of inherent efficiencies or reduced costs of the various production inputs (e.g., labor wage rates, skilled workforces, key materials, etc.) available from each locale. Other factors that have an impact on plant location decisions include transportation costs, infrastructure, and proximity to strategic markets.

² Production sharing occurs when a good is produced in two or more sequential stages; two or more countries provide value-added during the production of the good; and at least one country uses imported inputs in its stage of the production process. Hummels, Ishii, and Yi estimate that production sharing, which they term “vertical specialization,” accounts for 30 percent of world exports. See David Hummels, Jun Ishii, and Kei-Mu Yi, *The Nature and Growth of Vertical Specialization in World Trade*, Social Science Research Network, Working Paper No. 72, Mar. 1999. In defining “vertical specialization,” Hummels, et al, add a requirement that the resulting product be exported. Currently, however, more countries with export processing programs allow production-sharing operations to sell products in domestic markets. Such liberalization is an element of the North American Free-Trade Agreement (NAFTA).

³ See table B-19 for a listing of average hourly compensation costs for production workers in manufacturing for selected countries in North America, Europe, and Asia.

⁴ U.S. International Trade Commission (Commission or USITC) staff routinely monitor the effects of production sharing on U.S. industry and maintain contact with U.S. companies that take part in such arrangements. See ch. 3 for discussions of these operations in various industry sectors.

⁵ Under the “outward processing trade” tariff provision of EU customs law, the value of EU-origin content in imported articles is free of duty, much like the production-sharing provisions of the United States. For more information on production sharing in Eastern Europe see, “The Assembly Industry in Hungary: Implications of the Use of Production Sharing in Central Europe for U.S. Industries,” USITC, *Production Sharing: Use of U.S. Components and Materials in Foreign Assembly Operations, 1993-96*,

(continued...)

Taiwan use assembly plants in China, Indonesia, Malaysia, the Philippines, and Thailand to reduce their production costs. Production sharing has become an integral part of global efforts to reduce manufacturing costs.

Companies typically employ a variety of often overlapping manufacturing strategies to reduce costs or achieve other competitive advantages. These include the formation of strategic alliances,⁶ product specialization, vertical integration, contracting out production, establishing regional manufacturing centers, and closer coordination between producers and their suppliers of components and other industrial inputs. Each of these strategies has implications for plant locations and the cross-border flow of components, subassemblies, and final goods. The integration of manufacturing between countries can run the spectrum from simple use of border assembly plants to a high degree of cross-border rationalization of manufacturing operations and services. A higher degree of integration connotes greater interdependence of operations in one country with operations in other countries. This report will examine how these strategies and other competitive factors have influenced manufacturing integration⁷ with Canada, Mexico, and the Caribbean Basin (chapter 2).

The United States implemented special tariff provisions in 1964 that encourage the use of U.S.-origin content in foreign assembly operations. U.S. imports of goods that are assembled or processed abroad from U.S.-made components or materials (also referred to as the U.S. content) are eligible for a partial exemption of duty under the production-sharing provisions of subchapter II, Chapter 98 of the Harmonized Tariff Schedule of the United States (HTS). These provisions permit a duty exemption for the value of U.S.-made components that are returned to the United States as parts of articles assembled abroad (HTS 9802.00.80), or for articles using U.S.-origin metal (except precious metal) that are returned to the United States for further processing (HTS 9802.00.60). In addition, as a result of NAFTA, HTS 9802.00.90 was created to allow for the duty-free treatment of textile and apparel products assembled in Mexico from U.S.-formed and U.S.-cut fabric.⁸ During 1998, imports entered under the production-sharing provisions were valued at \$74.1 billion, accounting for 8.2 percent of total U.S. merchandise imports (table B-1). The value of the U.S.-made components or materials contained in these imports totaled \$25.2 billion, representing 34 percent of the total value of U.S. imports entered under these provisions. Duty savings from use of these tariff provisions amounted to \$2.0 billion (table B-17).

⁵ (...continued)

USITC publication 3077, Dec. 1997.

⁶ Strategic alliances consist of a variety of business arrangements, including joint ventures, long-term supply agreements, shared product development costs, and joint marketing efforts.

⁷ These international production networks can take many forms. See, for example, Rob van Tulder and Winfried Ruigrok, "European Cross-National Production Networks in the Auto Industry: Eastern Europe as the Low End of the European Car Complex," BRIE Working Paper 121, May 1998.

⁸ For apparel entered under 9802.00.80, only the value of the U.S.-cut fabric pieces and U.S.-made fasteners (buttons and zippers) is free of duty; under 9802.00.90, the value added in Mexico (such as labor and overhead) is also free of duty (see the section on apparel in ch. 3 for greater detail). See app. A of this report for a discussion of the mechanics and legal framework associated with the production-sharing tariff provisions. For the legal text of the provisions, see ch. 98 of the HTS and applicable notes. For the purposes of this report, statistical information on imports under HTS headings 9802.00.60, 9802.00.80, and 9802.00.90 is combined.

Scope and Organization of the Report

The current report presents recent developments in manufacturing integration with North American and Caribbean Basin partners for key industry sectors. The use of cross-border manufacturing in North America and the Caribbean Basin continues to increase as firms seek to reduce costs and delivery times, and to gain greater economies by establishing manufacturing sites closer to their intended markets or industrial customers. The report makes use of official statistics of the U.S. Department of Commerce for total U.S. imports, exports, and trade balances and imports under the production-sharing tariff provisions during the most recent 4-year period (1995-98). Much of the industry- and country-specific information comes from interviews with company officials, trade associations, trade journals, and U.S. State Department reports.

This report series has traditionally focused on the use of foreign assembly plants by U.S. companies to reduce costs and maintain global competitiveness, and has largely relied on imports entered under HTS provisions 9802.00.60-.90 to monitor trends in production-sharing operations. However, liberalized trade that has enabled a growing portion of U.S. imports to enter free of duty over the past decade, and elimination of the Customs merchandise processing fee (user fee) applicable to U.S. imports from Canada and Mexico under CFTA and NAFTA, have diminished the incentive for importers to seek exemption from duties and the Customs user fee by entering goods under these production-sharing tariff provisions (see "Note," in the accompanying text box). As a result, U.S. statistics reported under HTS 9802.00.60-.90 are increasingly underestimating the magnitude and scope of production-sharing activity. Consequently, recent reports have made greater use of supplemental sources of information than earlier reports to document the accelerated pace of cross-border integration of manufacturing in North America and the Caribbean Basin. The current report continues this trend toward more extensive use of supplemental sources.

This chapter provides information and trends based on official U.S. statistics on imports under the production-sharing provisions, as well as information from supplemental sources. Chapter 2 presents developments in manufacturing integration of North American partners-- Canada, Mexico, and the countries of the Caribbean Basin. Chapter 3 examines the increasing use of cross-border manufacturing by the North American industries producing apparel, motor vehicles and parts, and color television receivers and parts. Each of these industries has relied heavily on cross-border manufacturing in North America or the Caribbean Basin to reduce costs and maintain its global competitiveness. In each of these industries, production in Mexico is evolving from simple assembly operations to higher value-added manufacturing that increasingly makes use of vertical integration, either on site or through the clustering of industrial suppliers and customers. These selected industries illustrate developments that are occurring as other industry sectors also look to integrated manufacturing in North America as an effective manufacturing strategy.

Appendix A of this report explains the preferential tariff provisions applicable to qualifying goods from the Caribbean Basin; the trade agreement status of HTS 9802.00.60 - 9802.00.90; how the production-sharing provisions relate to other preferential tariff and special access programs; and the use and application of the Customs user fee. Appendix B contains a variety of statistical tables that provide data with respect to U.S. imports under the production-sharing provisions for the principal supplying countries and by product category, and supplemental tables on North American trade. Appendix C contains official statistics of the Government of Mexico.

NOTE

Past reports in this series on U.S. production-sharing activity relied heavily on official U.S. statistics on imports under the HTS Chapter 98 production-sharing provisions. These tariff provisions provide a duty exemption for the value of U.S.-made components that are incorporated in imported articles that have been assembled abroad. The domestic content of U.S. imports entered under these production-sharing provisions is also exempt from the merchandise processing fee (the customs "user fee" - - a 0.21 percent ad valorem fee with a \$485 per entry cap).

Firms that import articles free of duty, either with an unconditional general duty rate of free or under trade preference programs such as the North American Free-Trade Agreement (NAFTA), which replaced the U.S. Canada Free-Trade Agreement (CFTA), or the Caribbean Basin Economic Recovery Act (CBERA), have a greatly reduced incentive to enter those articles under the production-sharing provisions. Since the CFTA phased out the user fee applicable to U.S. imports from Canada qualifying as originating goods, as of January 1, 1994, and NAFTA duties were reduced to free, only a small percentage of U.S. imports from Canada that contain U.S.-origin components have been entered under these Chapter 98 provisions (mainly nonoriginating goods under NAFTA). As a result, the reported use of U.S. content in the foreign production of articles for the U.S. market is understated in U.S. statistics, particularly for imports from Canada. Nevertheless, the examination of imports under the production-sharing provisions remains a valid and important tool for measuring the use of U.S.-made components in assembly operations located in other U.S. trading partners. Many importers of duty-free articles from Mexico (a principal production-sharing partner), and certain countries in the Caribbean Basin and Southeast Asia, continue to use these provisions because of their exemption from the user fee on the value of U.S.-origin content.

A significant increase in the understatement of production sharing in official statistics with regard to 1999 imports from Mexico is anticipated with the July 1, 1999, elimination of the user fee applicable to imports from Mexico under NAFTA (0.19 percent ad valorem). Before the user fee was eliminated, importers of duty-free Mexican products were exempt from the merchandise processing fee on goods entered under the provisions of HTS general note 12 (concerning NAFTA) by importing under these Chapter 98 provisions. Many companies with production-sharing operations in Mexico whose products met the NAFTA rules of origin requirements entered their products under both NAFTA and Chapter 98 production-sharing provisions. The value of the U.S.-origin components contained in the imported article was free of both customs duties and the user fee under these provisions, while the remaining value added to the assembled good in Mexico received a preferential NAFTA duty rate but was subject to the user fee.

In 1998, 28 percent (\$19 billion) of all imports that entered under NAFTA from Mexico was also entered under Chapter 98 production-sharing provisions. As a percentage of total imports, this represents a decline from 33 percent in 1997 mainly because more imports from production-sharing operations are being entered under NAFTA only, particularly in the transportation and machinery sectors, as duty rates are reduced or eliminated. For many companies, the expense of complying with Customs record-keeping requirements for entry under the production-sharing provisions exceeded the savings gained by exemption from the user fee. Other companies minimized user fees by entering a number of shipments from Mexico into U.S. foreign-trade zones and then shipping a single entry for customs purposes from the zone, thereby paying the \$485 per entry cap only one time. See appendix A for more information about the user fee and the customs treatment of goods from Mexico.

A sampling of related research on the use of foreign plants and their integration into corporate regional manufacturing strategies indicates the preponderant use of case studies. Because of the difficulty in obtaining foreign trade statistics by types of manufacturing operations or by the country of origin of components and materials incorporated in imported articles, most researchers tend to extrapolate based on case studies of narrowly defined industries in specific regions. Trade data on the cross-border flow of parts and finished goods tend to be supplemented with data on investment and interviews with company officials making the investments, and with government and business representatives of communities or countries where the investments are taking place. Examples of research based on case studies of individual industries (usually in a particular region) include Echeverri-Carroll⁹; Ernst¹⁰; Rabon¹¹; Shaiken and Herzenberg¹²; Van Tulder and Ruigrok,¹³ and Youngsoo.¹⁴ Studies looking at a cross section of industries within a region include Blank, Krajewski, and Yu¹⁵; Echeverri-Carroll¹⁶; Lemoine¹⁷, Whiting¹⁸; Wilson¹⁹; Zysman, Doherty, and Schwartz²⁰; and Zysman and Schwartz.²¹ Hummels, Ishii, and Kei-Mu²² have developed a model to assess the impact of reductions in tariffs and transportation costs on the worldwide use of production sharing, which they term “vertical specialization.”²³ Much earlier,

⁹ Elsie Echeverri-Carroll, *Industrial Restructuring of the Electronics Industry in Guadalajara, Mexico: From Protectionism to Free Trade*, Austin, TX: Bureau of Business Research of the University of Texas at Austin, 1999.

¹⁰ Dieter Ernst, “From Partial to Systemic Globalization: International Production Networks in the Electronics Industry,” BRIE Working Paper 98, Apr. 1997.

¹¹ Lisa Rabon, “Getting a Piece of the Textile Pie,” *Bobbin*, May 1998.

¹² Harley Shaiken and Stephen Herzenberg, *Automation and Global Production: Automobile Engine Production in Mexico, the U.S., and Canada*, La Jolla, CA: Center for U.S.-Mexican Studies, University of California at San Diego, 1988.

¹³ Tulder and Ruigrok, “European Cross-National Production Networks.”

¹⁴ Youngsoo Kim, “Technological Capabilities and Samsung Electronics’ International Production Network in Asia,” BRIE Working Paper 106, Nov. 1997.

¹⁵ Stephen Blank, Stephen Krajewski, and Henry Yu, *U.S. Firms in North America: Redefining Structure and Strategy, North American Outlook*, Washington: National Planning Association, 1995.

¹⁶ Elsie Echeverri-Carroll, *Maquilas: Economic Impacts and Foreign Investment Opportunities, Japanese Maquilas—A Special Case*, Austin: Center for Technology Venturing and IC-2 Institute, The University of Texas at Austin, 1988; “Flexible Production and the North American Free Trade Agreement—The Impact on U.S. and Japanese Maquiladoras,” in Elsie Echeverri-Carroll, ed., *NAFTA and Free Trade in the Americas*, Austin: Bureau of Business Research of the University of Texas at Austin, 1995; and *Japanese Style Networks and Innovations in High Technology Firms in Texas*, Austin: Bureau of Business Research and IC-2 Institute, The University of Texas at Austin, 1998.

¹⁷ Francoise Lemoine, “Integrating Central and Eastern Europe in the European Trade and Production Network,” BRIE Working Paper 107, July 1998.

¹⁸ Van Whiting, *Regionalization in the World Economy: NAFTA, the Americas and Asia Pacific*, San Diego: University of California at San Diego, 1996.

¹⁹ Patricia Wilson, *Exports and Local Development: Mexico’s New Maquiladoras*, Austin: The University of Texas, 1992.

²⁰ John Zysman, Eileen Doherty, and Andrew Schwartz, “Tales from the “Global” Economy: Cross National Production Networks and the Re-organization of the European Economy,” BRIE Working Paper 83, June 1996.

²¹ John Zysman and Andrew Schwartz, “Reunifying Europe in an Emerging World Economy: Economic Heterogeneity, New Industrial Options, and Political Choices,” *Journal of Common Market Studies*, Mar. 29, 1998. Also available as BRIE Working Paper 113.

²² Hummels, Ishii, and Yi, “The Nature and Growth of Vertical Specialization.”

²³ Several papers of the Berkeley Roundtable on the International Economy (BRIE) use the term

(continued...)

Grunwald and Flamm²⁴ also examined production sharing on a global scale, using both statistical analysis (based on U.S. imports under the production-sharing tariff provisions) and case studies.

Overview of Aggregate Trends

- ! Collectively U.S. exports of all products to Canada, Mexico, and the Caribbean Basin rose by 5 percent (\$11.3 billion) in 1998 to \$232.3 billion, whereas exports to other regions of the world fell by 5 percent (\$19.9 billion) to \$402.4 billion (table 1-1). U.S. trade with Canada, Mexico, and the Caribbean Basin accounted for 37 percent of total U.S. exports in 1998 and 31 percent of U.S. imports.

- ! The majority of U.S. imports from Canada and Mexico that incorporate U.S.-made parts no longer are entered under the Chapter 98 production-sharing provisions because they are already eligible for duty-free treatment under NAFTA and other trade liberalizing WTO agreements or trade-preference programs. Therefore, official U.S. statistics on imports under these provisions increasingly underestimate the magnitude of production-sharing activity.

- ! The official reported value of products entered under the production-sharing provisions declined by \$5.1 billion (6 percent) in 1998 to \$74.1 billion (table B-2). Similarly, the U.S. content of imports entered under the production-sharing tariff provisions from all countries decreased by 5 percent (\$1.4 billion) in 1998 to \$25.2 billion (table 1-2). This decline was generated primarily by the drop in the value of U.S. components contained in imports from Mexico under these provisions, which fell by 6 percent (\$999 million) to \$14.5 billion, or 57 percent of the total U.S. content in imports under the production-sharing provisions.

- ! Imports under the production-sharing provisions continue to account for a significant portion of U.S. trade with Mexico and certain countries of the Caribbean Basin despite a shift by some firms to enter imports free of duty under NAFTA, CBERA, or the Information Technology Agreement. Imports under the production-sharing provisions accounted for 29 percent (\$27.2 billion) of total imports from Mexico in 1998 (table 1-2), compared with 63 percent each from the Dominican Republic (\$2.8 billion) and Honduras (\$1.6 billion). By contrast, imports reported under the production-sharing provisions amounted to only 0.2 percent (\$428 million) of total imports from Canada.

²³ (...continued)

“international production networks” when referring to production-sharing operations.

²⁴ Joseph Grunwald and Kenneth Flamm, *The Global Factory: Foreign Assembly in International Trade*, Washington, DC, Brookings Institution, 1985.

Table 1-1

Merchandise trade: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, for NAFTA, CBERA, and other partners, 1995-98
(Million dollars)

Country/region	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Canada	113,261	119,123	134,794	137,768
Mexico	44,881	54,686	68,393	75,369
CBERA	14,870	15,375	17,808	19,200
Other	373,453	392,954	422,228	402,368
Total	546,465	582,137	643,222	634,705
U.S. imports for consumption:				
Canada	144,882	156,299	167,881	174,685
Mexico	61,721	74,179	85,005	93,017
CBERA	12,550	14,545	16,572	17,124
Other	520,507	545,447	592,968	622,820
Total	739,660	790,470	862,426	907,647
U.S. merchandise trade balance:				
Canada	-31,621	-37,176	-33,087	-36,918
Mexico	-16,840	-19,493	-16,612	-17,648
CBERA	2,320	830	1,235	2,076
Other	-147,055	-152,494	-170,741	-220,452
Total	-193,196	-208,333	-219,204	-272,942

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Overview of Principal Sectors

- ! The cross-border integration of manufacturing in North America and the Caribbean Basin increases trade in parts as well as finished goods. Leading examples are the industries producing motor vehicles, apparel, and television receivers, as well as parts for these goods (chapter 3); these sectors accounted for 33 percent of total U.S. imports from Canada, Mexico, and the Caribbean Basin in 1998, and 24 percent of U.S. exports to these partners (table 1-3). In each of these industries, certain capital-intensive operations remain in the United States and Canada, while labor-intensive processes are performed in Mexico or the Caribbean Basin. Other significant industry sectors that follow this pattern include household appliances, telecommunications equipment, disposable medical goods, measuring and testing equipment, electric motors, and electrical circuit apparatus.
- ! Employment and output trends in the United States, Canada, and Mexico (as available) were mixed during 1995-98 for the major household appliance, automotive, television, and apparel industries highlighted in chapters 2 and 3 (table 3-1). Producers' shipments increased in most sectors during 1995-98, especially in the automotive sectors. Employment was more variable, declining in certain sectors despite increased shipments. All three NAFTA partners experienced significant increases in both producers' shipments and employment in the motor vehicle parts sector.²⁵

²⁵ A variety of factors are likely to have influenced these trends, such as sustained economic growth in the NAFTA region, technological innovations, exchange rate fluctuations, developments associated with NAFTA and the Uruguay Round, the recent Asian financial crisis, and other market forces. Therefore, changes in output and employment are difficult to link to any single economic development and such analysis is beyond the scope of this report.

Table 1-2
U.S. imports for consumption: Total and under the production-sharing provisions of HTS Chapter 98, by principal suppliers, 1995-98

(Million dollars)

Country	1995	1996	1997	1998
Total imports				
Mexico	61,721	74,179	85,005	93,017
Dominican Republic	3,385	3,582	4,308	4,445
Honduras	1,441	1,797	2,320	2,544
Philippines	6,990	8,174	10,419	11,875
Malaysia	17,401	17,771	17,888	18,817
Korea	24,026	22,532	22,939	23,701
El Salvador	813	974	1,345	1,436
Costa Rica	1,842	1,963	2,322	2,742
Taiwan	28,875	29,797	32,474	32,985
Japan	122,402	114,762	120,480	121,313
All other	470,765	514,939	562,926	594,773
Total	739,660	790,470	862,426	907,647
Production-sharing imports under HTS Chapter 98				
Mexico	24,962	27,925	28,883	27,162
Dominican Republic	1,965	2,104	2,669	2,806
Honduras	676	981	1,380	1,604
Philippines	1,749	1,805	2,063	2,254
Malaysia	2,778	2,382	1,911	1,831
Korea	1,798	1,787	1,881	1,601
El Salvador	497	605	912	1,023
Costa Rica	707	694	851	845
Taiwan	1,193	1,048	1,248	1,511
Japan	6,069	7,797	15,667	12,363
All other	18,486	20,388	21,700	21,067
Total	60,880	67,514	79,167	74,068
U.S. content of imports under HTS Chapter 98				
Mexico	12,833	14,649	15,483	14,484
Dominican Republic	1,278	1,365	1,737	1,766
Honduras	480	694	983	1,142
Philippines	785	773	1,058	1,129
Malaysia	1,313	1,116	930	915
Korea	600	653	755	786
El Salvador	276	344	544	592
Costa Rica	472	481	568	552
Taiwan	424	375	510	543
Japan	360	265	548	506
All other	3,289	3,249	3,450	2,798
Total	22,110	23,965	26,565	25,213

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 1-3
U.S. trade with Canada, Mexico, and the Caribbean Basin region, by leading sectors, 1998

Sector	Billion dollars					Percentage	
	Canada	Mexico	Caribbean Basin	North American total	Other	Total	North American share
U.S. imports:							
Motor vehicles and parts . . .	49.5	23.8	(¹)	73.3	63.6	136.9	54
Apparel	1.6	6.6	8.3	16.5	37.1	53.6	31
Color television receivers and parts	(¹)	4.3	(¹)	4.3	1.5	5.8	73
Other	123.6	58.3	8.8	190.7	520.6	711.3	27
Total	174.7	93.0	17.1	284.8	622.8	907.6	31
U.S. exports:							
Motor vehicles and parts . . .	35.6	9.8	1.5	46.9	15.7	62.6	75
Apparel	0.6	2.6	3.8	7.0	1.5	8.5	82
Color television receivers and parts	0.4	1.8	0.1	2.2	1.6	3.8	59
Other	101.2	61.2	13.8	176.2	383.6	559.8	31
Total	137.8	75.4	19.2	232.3	402.4	634.7	37
Trade balance:							
Motor vehicles and parts . . .	-13.9	-14.0	1.5	-26.4	-47.9	-74.3	36
Apparel	-0.9	-4.0	-4.5	-9.4	-35.7	-45.1	21
Color television receivers and parts	0.4	-2.5	0.1	-2.0	(¹)	-2.0	100
Other	-22.4	2.9	5.0	-14.5	-137.0	-151.5	10
Total	-36.9	-17.6	2.1	-52.4	-220.5	-272.9	19

¹ Less than \$50 million.

Note.—Calculations are based on unrounded data.

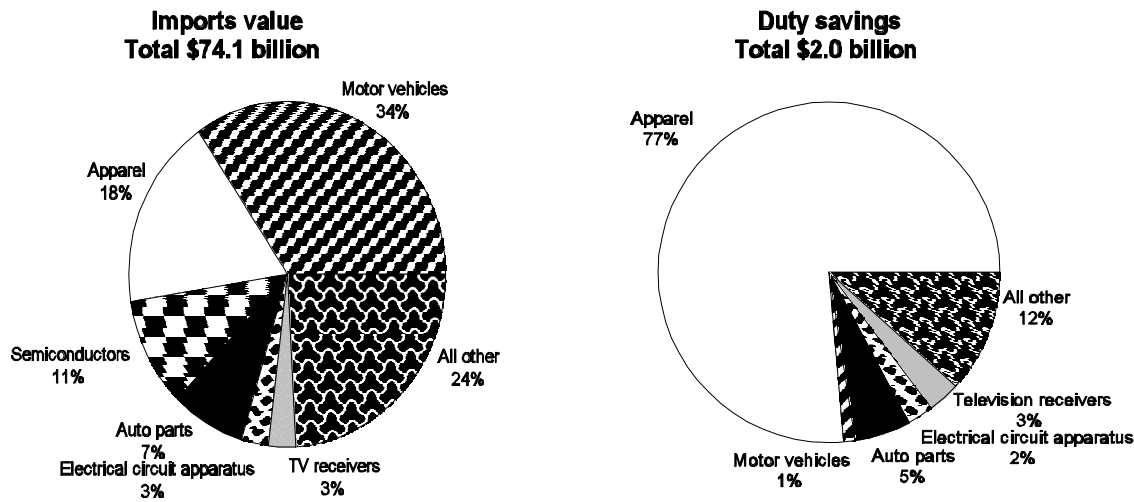
Source: Compiled by staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

- ! Apparel²⁶ accounted for \$12.9 billion (18 percent) of the total value of 1998 imports reported under the production-sharing provisions, \$8.0 billion (32 percent) of the U.S. origin content used in foreign assembly operations, and \$1.6 billion (77 percent) of the duty savings derived from production-sharing operations (figure 1-1 and table B-3). The high average trade-weighted rate of duty on apparel (15.8 percent ad valorem) relative to all other products (approximately 3 percent) provided a strong economic incentive to U.S. apparel producers to use these provisions to avoid duties on the fabric portion of apparel imports. This situation changed on January 1, 1999, as most apparel imported from Mexico became duty free under NAFTA²⁷ (chapter 3).
- ! The phase-out of U.S. import quotas by 2005 under the WTO textile agreement will gradually erode the preferences of CBERA countries under the GALs, possibly resulting in a gradual shift of some assembly operations from CBERA countries to Mexico. Major textile manufacturers also indicate that the establishment of vertically integrated operations, as well as integrated manufacturing networks, in Mexico is likely to help those firms recapture some of the business previously lost to Asian competitors in the North American market.

²⁶ Does not include footwear and parts, medical apparel, or textiles and textile products.

²⁷ Provided the apparel is made from fabric manufactured and cut in Mexico, Canada, or the United States.

Figure 1-1
U.S. imports under the production-sharing provisions of HTS Chapter 98, share of total value and duty savings, by selected industries, 1998



¹Semiconductors enter the United States free of duty and accounted for no duty savings under the production-sharing provisions in 1998.

²Includes certain motor-vehicle parts, internal combustion piston engines, wiring harnesses for motor vehicles, and ignition, starting, and light equipment.

Source: Compiled by the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

- ! Motor vehicles and parts accounted for 28 percent (\$49.5 billion) of total U.S. imports from Canada, and 26 percent (\$23.8 billion) from Mexico in 1998; as well as 26 percent (\$35.6 billion) of total U.S. exports to Canada and 13 percent (\$9.8 billion) to Mexico (table 1-3). During the last 4 years, the U.S. automotive industry has experienced growth in total trade, robust production and capacity utilization levels, and continued investment.
- ! U.S. and foreign automakers have accelerated the degree to which their product lines are rationalized between Mexico and their other North American operations in response to the market access provisions under NAFTA. These manufacturers view their Mexican operations as an integral part of their regional and global planning strategies. Although, the level of integration between Mexican and U.S. operations has not reached that of the U.S. and Canadian industries, Mexico's expansion of preferential trade agreements with non-NAFTA trade partners provides automakers with duty-free access to more countries from their assembly facilities in Mexico than from their plants in the United States,²⁸ encouraging further investment in Mexico.
- ! The historical domination of the Mexican market for auto parts by U.S. suppliers is being challenged as German and Japanese automakers continue to establish and expand assembly operations in Mexico and attract similar investments from their traditional parts suppliers.
- ! Production-sharing operations for smaller-screen color television receivers (CTVs), located almost exclusively in Mexico, have evolved from simple component assembly to highly

²⁸ In addition to NAFTA, Mexico has free trade agreements with Costa Rica, Nicaragua, Colombia, Venezuela, Bolivia, and Chile.

integrated operations that produced \$3.5 billion of finished receivers in 1998, of which 90 percent was exported to the United States. These operations have permitted North American-made televisions to maintain price competitiveness with imports from Asia (especially Malaysia and China). Production of large-screen televisions, color picture tubes, and certain other component parts is retained in the United States, as well as some administrative, design, marketing, and distribution functions. Although the pace of Asian investment (particularly Korean) in Mexican television receiver operations has recently slowed as a consequence of the Asian financial crisis, foreign-based suppliers will likely continue to expand production-sharing activities in Mexico to qualify for duty-free entry of CTVs under the country-of-origin requirements of NAFTA.²⁹

- ! U.S. color picture tube production is likely to remain strong and continue growing as long as cathode-ray tubes (CRT) remain the dominant display technology. CRT technology will likely remain the choice for smaller screen television receivers where price is the key factor. The rising trend toward larger screen sizes will benefit U.S. production of large screen television receivers vis-a-vis production in Mexico until new flat-panel display technologies become dominant.

Overview of Principal Partners³⁰

- ! It is believed that Canada and Mexico were the largest production-sharing partners for the United States in 1998. The predominance of production-sharing activity in Canada is centered around the production of motor vehicles and auto parts. U.S. imports of motor vehicles and parts from Canada amounted to \$49.5 billion in 1998 (table 1-3).
- ! Increased investment in maquiladora plants during the past 5 years can largely be attributed to currency devaluations in Mexico that have further lowered the cost of Mexican labor; provisions for duty-free U.S. imports of apparel from Mexico under HTS heading 9802.00.90 (created by NAFTA); expansion of assembly operations in Mexico (using U.S. components) instead of importing from Asia, to take advantage of preferential tariff treatment under NAFTA;³¹ and sustained demand in the U.S. market.
- ! Assembly plants in the interior of Mexico are undergoing structural transformations to a greater degree than maquiladora plants along the U.S.-Mexico border. Interior firms registered under the Maquiladora Program or PITEEX³² tend to sell more of their

²⁹ Television receivers imported from Mexico must incorporate a picture tube made in Mexico, Canada, or the United States to qualify as being of North American origin and eligible for duty-free entry into the United States under NAFTA.

³⁰ This section highlights trends within Mexico, Canada, and the Caribbean Basin (ch. 2).

³¹ Companies importing machinery and components from non-North American sources for use in assembly plants in Mexico will begin paying duties on such imports as of Jan. 1, 2001. In anticipation of these changes, many Asian- and European-owned maquiladoras have switched to U.S. suppliers of components and materials or have convinced non-North American suppliers to relocate to the United States or Mexico, or establish additional production facilities in North America.

³² The Program for Temporary Importation to Manufacture Exported Products (PITEEX) was established by the Maquiladora Decree of May 3, 1990. The PITEEX program was initially designed to allow Mexican companies that were producing for both the Mexican and export markets to import

(continued...)

production to the domestic Mexican market, and, consequently, are less dependent on exporting to the U.S. market. Interior firms also tend to use more local (Mexican) sources of components and materials than border firms, mainly in an effort to reduce transportation costs and border delays. Nevertheless, *Twin Plant News* reports that nationwide, less than 2 percent of all components for maquiladora assembly are made in Mexico.³³

- ! The countries of the Caribbean Basin accounted for \$7.7 billion (10 percent) of U.S. imports under the production-sharing provisions and for \$4.9 billion (20 percent) of the total U.S. content of entries under these provisions in 1998. Apparel accounted for 84 percent of U.S. imports under the production-sharing provisions from CBERA-eligible countries.

- ! U.S. imports of apparel from Mexico and the CBERA countries exceeded the growth of such imports from Asia, in large part due to the elimination of tariffs and quotas on garments and other textile articles assembled in Mexico from “fabric wholly formed and cut in the United States,” HTS provision 9802.00.90 (created pursuant to NAFTA in 1994). Apparel imports under 9802.00.90 from Mexico rose by \$983 million (23 percent) to \$5.2 billion during 1998, as the value of U.S. fabric employed in the Mexican assembly process increased by \$519 million (18 percent) to \$3.4 billion. In contrast to Mexico, CBERA countries qualify for guaranteed access levels (GALs) but importers must pay duty on the value added to garments outside the United States. Notwithstanding this competitive disadvantage, imports of apparel under the production-sharing provisions from the Caribbean Basin also continued to expand, rising by \$529 million (8 percent) to \$6.9 billion in 1998. The U.S. content of these entries increased by \$306 million (7 percent) to \$4.4 billion.

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³² (...continued)

materials and machinery free of duty provided that they were used in making goods to be exported. Access to the Mexican market under PITEX also afforded foreign investors certain advantages (e.g., being registered as a national supplier to the automotive industry) not originally available under the Maquiladora Program; most foreign-owned assembly plants located in the interior of Mexico are now registered under PITEX rather than the Maquiladora Program. PITEX companies, however, are subject to certain taxes (such as asset taxes) in Mexico for which plants registered in the Maquiladora Program are exempt until 2001. Assembly plants can operate only under either the Maquiladora Program or PITEX, but not both programs.

³³ Mike Patten, “Monterrey: Breweries to Maquilas,” *Twin Plant News*, Aug. 1999, p. 38. In sharp contrast to the rest of the country, producers in the state of Nuevo Leon supply 25 percent of the components and materials used by maquiladoras established in the state. The state’s maquiladoras are concentrated around the interior city of Monterrey, the center of Mexico’s steel, glass, and cement industry and home to Mexico’s leading university for engineering and business management.

CHAPTER 2

RECENT DEVELOPMENTS IN MANUFACTURING INTEGRATION IN NORTH AMERICA

Proximity helps make Canada, Mexico, and the Caribbean Basin the leading U.S. production-sharing partners. Their proximity lessens transportation costs and reduces delivery times, while facilitating business exchanges and operational oversight.

Relatively low labor costs and high tariffs associated with import substituting development policies provided U.S. companies with incentives to establish the initial production-sharing operations in Canada and Mexico in the 1960s. By manufacturing locally, U.S. firms could avoid tariffs and other import barriers in their efforts to supply these markets. In Canada, lower-cost labor at these same facilities could reduce manufacturing costs, encouraging the export of surplus production back to the United States.¹ In Mexico, however, companies established plants in the interior of the country (particularly in Guadalajara) to supply the domestic market, while using assembly plants along the border to reduce manufacturing costs for products destined for the U.S. market.² U.S. firms with assembly plants in Canada and Mexico initially imported a substantial portion of their industrial inputs from the United States, for which import barriers tended to be less restrictive than those for finished goods. Investors in certain sectors in Mexico, such as motor vehicles, also faced local content and export performance requirements. In such cases, U.S.

¹ The Tariff Schedules of the United States (TSUS), which were implemented in 1963, codified the U.S. Customs Service practice of not applying duty to the value of U.S. components incorporated in imported articles. Creation of this tariff provision (formerly TSUS item 807.00, now HTS subheading 9802.00.80) had the effect of encouraging use of production-sharing operations, particularly in North America and the Caribbean Basin. The rapid growth of production sharing between the Big Three auto makers in Detroit and affiliated companies in the Canadian Province of Ontario gave rise to the Automotive Products Trade Act of 1965, which put into effect an agreement between the United States and Canada to eliminate most duties on motor vehicles and parts traded between the two countries. See U.S. International Trade Commission, *The Use and Economic Impact of TSUS Items 806.30 and 807.00*, USITC publication 2053, Jan. 1988.

² Mexico's Border Industrialization Program (now the "Maquiladora" Program), which became effective in 1965, initially limited assembly plants relying on imported components to a 10-kilometer deep strip along the border with the United States. Components could be imported free of duty provided all of the assembled articles were exported. Other programs, such as the 1959 Law of Industrial Promotion implemented by the State of Jalisco, attracted foreign companies to invest in assembly plants in the interior of Mexico to supply the national market with capital and durable consumer goods, such as computers and photocopiers. Because of their low labor content, such goods were often more expensive to produce in Mexico than in the United States, but the goods were manufactured in Mexico nevertheless because of Mexico's high tariffs. See Elsie Echeverri-Carroll, *Industrial Restructuring of the Electronics Industry in Guadalajara, Mexico: From Protectionism to Free Trade*, Bureau of Business Research of the University of Texas at Austin, 1999.

companies invested in the development of local suppliers and/or persuaded suppliers based in the United States to establish manufacturing subsidiaries in Mexico.

Low labor costs and relative proximity to the textile mills of the Southeastern United States and to U.S. apparel markets were the key factors leading U.S. producers of apparel to establish sewing operations in the Caribbean Basin region. Apparel continues to dominate U.S.-Caribbean Basin trade in manufactured goods, with the United States exporting cut, ready-to-sew fabric, and importing finished garments. This chapter examines recent developments in trade in manufactured goods between the United States and its leading production-sharing partners.

Mexico

Mexico is the leading production-sharing partner for U.S. industry, with imports from Mexico under HTS provisions 9802.00.60-.90 amounting to \$27.2 billion in 1998 (table 1-2).³ The maquiladora industry in Mexico is evolving from primarily low-wage, labor-intensive, assembly plants to an increasingly sophisticated manufacturing sector well integrated with corporate affiliates, suppliers, and customers in the United States and Canada.

Trends Encouraging Cross-Border Integration

Liberalized foreign investment laws associated with Mexico's accession to the GATT in 1990 have facilitated the establishment of foreign assembly plants in the interior of Mexico and provided greater access to the emerging Mexican market. Part of the aim of the Mexican Government's new policies was to increase sales of Mexico-made industrial inputs to the maquiladora sector, especially steel mill products, automotive parts, and electrical components produced in the interior of Mexico.⁴ Changes in the Maquiladora Decree in 1989 also enabled maquiladora plants to sell a portion of their production to customers in Mexico. This new access to the Mexican market became an important element of marketing and manufacturing strategies of many U.S. and other foreign companies—even before NAFTA.⁵ Further, the legalization of intramaquiladora trade⁶ led foreign companies with assembly operations in Mexico to encourage foreign suppliers to establish production facilities near their Mexican plants and facilitated the development of integrated manufacturing clusters. Prior to NAFTA, these firms, as well as others

³ See tables C-1 and C-2 for official Mexican statistics on Mexico's exports to the United States in 1998, including separate statistics on exports by companies registered under Mexico's two export processing programs, Maquiladora and PITEX. References to the "maquiladora industry" or "maquiladoras" throughout this report encompass companies registered under either program. Both programs are governed by Mexico's Maquiladora Decree.

⁴ Seymour J. Rubin and Dean C. Alexander, "NAFTA and Investment," *Kluner Law International*, 1995, p. 43. Despite these efforts, less than 2 percent of components for the maquiladora industry are produced in Mexico from local materials. Mike Patten, "Monterrey, A Closer Look: Breweries to Maquilas," *Twin Plant News*, Aug. 1999, p. 36.

⁵ Sidney Weintraub, "Industrial Integration Policy: A U.S. Perspective," in Weintraub, ed., *U.S.-Mexican Industrial Integration: The Road to Free Trade*, 1991, p. 55.

⁶ Prior to this 1989 change in the Maquiladora Decree, companies operating as maquiladoras were required to export all of their production and could not sell assembled articles to customers in Mexico, including other maquiladora operations.

that had invested in Mexico to avoid Mexico's trade barriers still tended to view Mexico and the United States as distinct national markets, with many companies producing a wide range of products in each country.⁷

NAFTA accelerated the process of integration even before the agreement came into force. The most important effect was psychological, creating a popular vision that North America is one market. Many U.S. business leaders interpreted U.S. Government endorsement of the agreement as a signal that it was financially safe to invest in Mexico. On a more practical level, NAFTA reduced the cost of doing business in Mexico by lowering tariffs on imported manufacturing inputs and products destined for the local market. Liberalized foreign investment laws under NAFTA meant more competition, lower prices, and the development of local (albeit foreign-owned) suppliers. NAFTA also gave the maquiladora industry increased access to the Mexican market, with an amount equivalent to 80 percent of a company's previous year's production level eligible for sale in the domestic market in 1999. NAFTA's rules of origin and the scheduled termination of duty drawback on January 1, 2001,⁸ combined to provide an incentive for maquiladora managers to find North American suppliers of components to replace imported inputs from Europe and Asia, again leading to greater integration of North American manufacturing industries. These changes to the Maquiladora Program are regarded by some as the first step in the creation of a North American regional economy involving the increased integration of production assets between parent companies and their foreign assembly plants.⁹

Measures of Integration

Mexico was the second-largest market for U.S. exports in 1998 (\$75.4 billion). U.S. exports to Mexico consisted largely of intermediate goods and capital equipment (electrical products and electronic equipment, transportation equipment, and industrial machinery) primarily intended for the maquiladora industry and, to a lesser extent, the domestic manufacturing sector in Mexico oriented toward the local market.¹⁰

According to statistics of the U.S. Department of Commerce, U.S. imports from Mexico (primarily motor vehicles and parts, electrical/electronic products and components, and apparel) grew by \$8.0 billion (9 percent) in 1998 to \$93 billion (table 2-1). This increase in imports in

⁷ Stephen Blank and Jerry Haar, *Making NAFTA Work*, North-South Center Press, 1998.

⁸ NAFTA provides that, effective Jan. 1, 2001, firms operating under Mexico's Maquiladora Decree (which cover both the Maquiladora Program and PITEEX) will no longer be able to import components and materials free of duty, even if the resulting product is exported. This change to the Maquiladora Decree was timed to coincide with the elimination of duty-drawback for both the United States and Mexico with regard to products qualifying for duty preference under NAFTA. Companies that manufacture/assemble goods in Mexico for the U.S. market will have to pay a duty on imported industrial inputs that are not of North American origin; that duty is based on the higher of the U.S. or Mexican tariff rates. See U.S. International Trade Commission, "Implications of the North American Free Trade Agreement for Mexico's Maquiladora Industry and Use of the Production Sharing Provisions," in *Production Sharing: U.S. Imports Under Harmonized Tariff Schedule Provisions 9802.00.60 and 9802.00.80, 1989-1992*, USITC Publication 2729, Feb. 1994.

⁹ David W. Eaton, "Transformation of the Maquiladora Industry--The Driving Force Behind the Creation of a NAFTA Regional Economy," *National Law Center for Inter-American Free Trade*, 1997.

¹⁰ See table C-3 for imports by companies operating under Mexico's Maquiladora and PITEEX Programs in 1998.

Table 2-1

Mexico: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by industry sector, 1995-98

(Million dollars)

Industry sector	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Certain motor-vehicle parts ¹	5,911	5,824	7,833	7,586
Motor vehicles	362	1,159	1,938	2,259
Apparel	1,356	1,688	2,189	2,583
Computer hardware	1,188	1,947	2,479	2,441
Electrical circuit apparatus	1,932	2,424	2,944	3,062
Radio transmission and reception apparatus	512	492	704	755
Measuring, testing, and controlling instruments	874	778	1,098	1,178
Color television receivers and parts	902	1,218	1,476	1,780
Major household appliances	151	198	284	335
All other	31,693	38,958	47,448	53,390
Total	44,881	54,686	68,393	75,369
U.S. imports for consumption:				
Certain motor-vehicle parts ¹	7,247	8,144	9,617	10,563
Motor vehicles	8,386	11,714	12,270	13,225
Apparel	2,658	3,663	5,140	6,586
Computer hardware	1,918	3,061	4,655	5,448
Electrical circuit apparatus	1,722	1,817	2,143	2,369
Radio transmission and reception apparatus	1,259	1,337	1,795	2,003
Measuring, testing, and controlling instruments	1,290	1,291	1,562	1,965
Color television receivers and parts	3,278	3,456	3,562	4,265
Major household appliances	191	236	276	300
All other	33,772	39,460	43,985	46,293
Total	61,721	74,179	85,005	93,017
U.S. merchandise trade balance:				
Certain motor-vehicle parts ¹	-1,336	-2,320	-1,784	-2,977
Motor vehicles	-8,023	-10,554	-10,332	-10,965
Apparel	-1,302	-1,975	-2,951	-4,002
Computer hardware	-729	-1,114	-2,176	-3,007
Electrical circuit apparatus	210	607	801	694
Radio transmission and reception apparatus	-747	-845	-1,091	-1,248
Measuring, testing, and controlling instruments	-416	-513	-464	-787
Color television receivers and parts	-2,376	-2,238	-2,086	-2,485
Major household appliances	-40	-38	8	35
All other	-2,079	-502	3,463	7,097
Total	-16,840	-19,493	-16,612	-17,648

¹ The products covered in this group include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, seats and parts, and miscellaneous parts and accessories. The category "certain motor-vehicle parts" in the tables in app. B does not include engines and parts, wiring harnesses, or seats and parts.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

part reflects a continued shift of labor-intensive apparel and electronic assembly operations to regions in Mexico with lower labor costs.¹¹

The number of companies reported to be operating under the Maquiladora Program has grown from 2,122 plants when NAFTA came into force in 1994, to 3,185 plants during the first quarter of 1999. Although currency devaluations that have lowered labor costs in Mexico, proximity to the U.S. market, and a strong U.S. demand for the types of goods assembled in the maquiladora industry remain the major factors that have accelerated the growth of the maquiladora industry, several emerging trends have also assisted this growth. These trends include: (1) new investment in supplier facilities to support more integrated maquiladora trade, (2) the gradual expansion of consumer demand in Mexico, and (3) growing exports to Latin American countries with which Mexico has negotiated free-trade agreements.

Investment is another measure of cross-border integration. U.S. direct investment in Mexico on a historical cost basis amounted to \$25.9 billion in 1998, up 7 percent over the total in 1997 (table 2-2). However, investment in Mexico was about one-quarter the size of U.S. investment in Canada in 1998 (\$103.9 billion).

Examples of Integration, Including Major Household Appliances

The leading examples of the integration of manufacturing between the United States and Mexico involve motor vehicles and their parts, apparel, and color television receivers and parts, as discussed in chapter 3. These sectors accounted for 37 percent of U.S. imports from Mexico in 1998 and 19 percent of U.S. exports to Mexico (table 1-3). Other U.S. industries making significant use of assembly facilities in Mexico include computer hardware; radio transmission and reception apparatus;¹² electrical circuit apparatus; and measuring, testing, and controlling instruments (table 2-1). Collectively, these industries accounted for 13 percent of U.S. imports from Mexico in 1998.

Major household appliances is a relatively small trading sector, accounting for less than 1 percent (\$300 million) of 1998 U.S. imports from Mexico. Nonetheless, the production of such appliances is emerging as one of Mexico's fastest growing industries, and is one of many sectors experiencing cross-border integration of manufacturing operations. The U.S. trade balance with Mexico in the major household appliance sector shifted from a deficit of \$40 million in 1995 to a \$35 million surplus in 1998. Production in Mexico primarily takes place in the interior of the country in the major household appliance "clusters" of Monterrey, San Luis Potosi, Puebla, and Queretaro. Leading U.S. household appliance producers Whirlpool Corporation and General Electric (GE), as well as Korean producers Daewoo and Samsung, have established production in these cities to benefit from an inexpensive and readily available labor supply and the rapidly

¹¹ ITC staff interview with Lucinda Vargas, Senior Economist, El Paso Branch, Federal Reserve Bank of Dallas, Dec. 10, 1999.

¹² Motor vehicle clock radios and radio/tape and/or CD player combinations accounted for the bulk (66 percent) of U.S. imports from Mexico in the product grouping "radio transmission and reception apparatus," with imports of all products in this grouping valued at \$2.0 billion in 1998 (table 2-1). Other significant products included in this grouping were printed circuit assemblies for radio, television, and navigational apparatus (12 percent of group imports from Mexico in 1998), and paging receivers (11 percent).

Table 2-2
U.S. direct investment abroad (USDIA) on a historical cost basis: Canada, Mexico, and selected Caribbean Basin countries, 1995-98

(Million dollars)

Country	1995	1996	1997	1998
Canada	83,498	89,592	96,031	103,908
Mexico	16,873	19,351	24,181	25,877
Costa Rica	921	1,223	1,544	2,126
Dominican Republic	330	400	476	535
Guatemala	233	331	357	429
Honduras	68	129	183	186
All other	597,092	684,169	742,759	847,504
Total (all countries)	699,015	795,195	865,531	980,565

Note.—According to the Bureau of Economic Analysis, foreign direct investment is investment in which a resident of one country obtains a lasting interest in, and a degree of influence over the management of, a business enterprise in another country. In the United States, the criterion used to distinguish USDIA from other types of investment abroad is the ownership, by one U.S. resident, of at least 10 percent of a foreign enterprise.

Source: International Accounts Data, U.S. Direct Investment Abroad, Bureau of Economic Analysis, found at Internet address: <http://www.bea.doc.gov/bea/di/dia-cty.htm>, retrieved Aug. 16, 1999.

developing growth of the domestic market.¹³ Japan-based Sanyo has also integrated its North American production, employing the “twin plant” concept with complementary facilities a few miles apart from each other on either side of the U.S.-Mexico border near San Diego.¹⁴

Joint Ventures

Whirlpool’s joint-venture with Mexican glass conglomerate Vitro Corp., of Monterrey, Mexico, (Supermatic) primarily involves manufacturing a line of predominantly small household refrigerators (19 cubic feet or under) and low-end washers and dryers for the highly price competitive segment of the U.S. market. Production of larger sized refrigerators (larger than 19 cubic feet) and higher quality washers and dryers remains in the United States and Canada.¹⁵ According to an official of the joint venture, the U.S. appliance industry was experiencing growing competition from small, low-priced refrigerators imported from Asia when Whirlpool entered into the joint venture with Vitro in 1989. For Whirlpool, the alternative to shifting production of smaller refrigerators to Mexico was to cease producing refrigerators entirely because the company could not produce smaller refrigerators at competitive prices in the United States and could not stay in business producing only top-of-the-line refrigerators.¹⁶ Both the smaller Mexican-made appliances and the larger, more sophisticated U.S.-made appliances are sold in the United States and Canada through Whirlpool’s distribution network, including private-label customers, and in Mexico through Vitro’s distribution network. Whirlpool also supplies the Central American market from

¹³ Joel Millman, “Mexico Builds a Home-Appliance Bonanza,” *Wall Street Journal*, Aug. 23, 1999, p. A-12.

¹⁴ The other leading companies that produce major household appliances in North America are Amana and Maytag, neither of which have production facilities or joint ventures in Mexico.

¹⁵ Whirlpool makes its higher quality refrigerators in Evansville, IN.

¹⁶ ITC staff interview with Juan Bendick Lopez, Gerente Efectividad Organizacional, Supermatic, S.A. de C.V., Apodaca, Nuevo Leon, Mexico, June 19, 1997.

its joint venture with Vitro. Additionally, Whirlpool's Canadian, U.S., and Mexican management and marketing structure was consolidated into a North American Appliance Group (NAAG). The primary objective of the company's NAAG was to improve manufacturing efficiency, gain economies of scale, and improve the cost effectiveness in all of its North American operations.¹⁷

Vitro officials indicated that although Whirlpool encouraged suppliers to establish local production facilities near its joint venture appliance assembly plants in the Monterrey area, about 80 percent of the components used in the assembly process were imported, with almost all coming from the United States.¹⁸ Suppliers that did establish assembly plants near the Vitro complex include Emerson Electric (electric motors) and Danfloss (refrigeration compressors). Each imports parts from its parent company in the United States and in Denmark,¹⁹ respectively. Materials imported from the United States for use in the manufacture of refrigerators and washers include raw plastics²⁰ and steel.²¹ U.S.-made components used in Vitro's assembly of appliances include automatic defrosters, refrigeration compressors, control boards, wheels, aluminum tubing and condensers, plastics tops, and shelving.²² Key Mexican-made inputs include polyurethane foam, certain plastics, and small steel parts. Some compressors are purchased from Whirlpool's joint venture in Brazil (Embraco). Solenoids are imported from Korea. According to Vitro officials, NAFTA reduced the company's costs for importing components from the United States and enabled appliances from the Vitro/Whirlpool venture to be of higher quality and more affordable for Mexican consumers.²³

Diminishing profit margins in the mature U.S. market, the growth potential of the Mexican market, and the desire to keep up with rival Whirlpool led GE to form an alliance with Mexican appliance manufacturer MABE in 1990. The GE/MABE joint venture manufactures gas ranges in San Luis Potosi and Queretaro and is reported by its competitors to be the largest supplier of gas ranges to both the U.S. and Mexican markets.²⁴ GE supplies small refrigerators to the entire North American market from its joint-venture facility in Celaya, Guanajuato, and large, side-by-side refrigerators from its plant in Ft. Smith, Arkansas. The GE/MABE strategic alliance in Mexico has also led parts suppliers (e.g., Gemtron Corp. of Sweetwater, Tennessee) to establish assembly plants in San Luis Potosi to provide GE/MABE with essential appliance components. Such investments, and efforts by certain Mexican steel makers to address the needs

¹⁷ William Marohn, executive vice president, North American Appliance Group, quoted in Anne Henry, "The Consolidation Story," *Appliance*, June 1991, W-83.

¹⁸ ITC staff interviews with Fernando Fernandez M., vice president, Corporate Quality, Vitro Household Products Division, and Bendick, Supermatic, Apodaca, Nuevo Leon, Mexico, June 19, 1997. Less sophisticated appliances made by Vitro for the Mexican market use fewer components from the United States.

¹⁹ Danfloss has significant production facilities in the United States as well. Certain parts, however, are made exclusively in Denmark.

²⁰ Vitro has its own injection molding facility. The machinery there was made in the United States.

²¹ Prior to its joint venture with Whirlpool, Vitro used Mexican-made steel. U.S. steel is of better quality for the appliance industry. Local mills in Monterrey specialize in steel for housing and infrastructure construction markets.

²² Bendick, Supermatic, June 19, 1997.

²³ ITC staff interview with Bendick, Supermatic, and Juan Jose Galindo, Gerente de Relaciones Publicas, Vitromatic Comercial, S.A. de C.V., Apodaca, Nuevo Leon, Mexico, June 19, 1997.

²⁴ ITC staff interviews with Fernandez, Vitro, June 19, 1997; and Myung Jun Kim, General Manager/Import and Export Department, Daewoo Electronics, Home Appliance de Mexico, S.A. de C.V., May 18, 1998.

of the major household appliance industry, have contributed to the reported decline in the share of U.S.-made parts used in the assembly of GE/MABE appliances in Mexico from 84 percent in 1997 to 70 percent in 1999.²⁵

Asian Investors

Most of the appliances manufactured by Daewoo and Samsung in Mexico are sold in the Mexican market or exported to Central and South American countries with which Mexico has free-trade agreements. Reportedly, only a small portion is exported to the United States.²⁶ Daewoo imports refrigeration compressors from Korea, and only a small share of the industrial inputs used by Daewoo is imported from the United States.

In contrast to Korean-based appliance producers in Mexico, Sanyo relies heavily on U.S.-made parts in its North American facilities. Sanyo makes freezers in Indiana, medium-sized refrigerators in San Diego (Otay Mesa), and minirefrigerators in Tijuana. U.S.-made parts are sent to Sanyo/Tijuana for assembly into electronic products and wiring harnesses that are used in refrigerator assembly in both Tijuana and San Diego. U.S. steel and certain other U.S.-origin industrial inputs go directly from U.S. vendors to the San Diego and Tijuana plants. Motors for both plants are sourced from maquiladora vendors that assemble the motors in Mexico from U.S. parts. Compressors are the only significant components used in Sanyo's refrigerator assembly plants that are imported from Asia.²⁷

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Canada

High levels of both sectoral two-way trade and foreign direct investment indicate continued cross-border integration and rationalization of production between the United States and Canada, as well as a deepening interdependence of manufacturing industries. Canada was the second-leading destination for U.S. direct investment at \$103.9 billion in 1998 (table 2-2),²⁸ with the manufacturing sector accounting for \$46.0 billion of the total. About 40 percent of the assets of Canadian manufacturing companies are foreign-owned; of this total, about 75 percent are

²⁵ Joel Millman, "Mexico Builds a Home-Appliance Bonanza," *Wall Street Journal*, Aug. 23, 1999, p. A12.

²⁶ Fernandez Vitro, June 19, 1997; and Kim, Daewoo, May 18, 1998.

²⁷ Based on ITC staff interviews with Alan Foster, Manager for Administration & Operations, and Charles D. La Pointe, Production Manager, Sanyo E & E Corp., San Diego, CA, June 1987, and updated with follow-up discussions.

²⁸ The United Kingdom accounts for the largest share of U.S. FDI with \$178.6 billion in 1998. In rank order, Canada was followed by the Netherlands (\$70.3 billion), Germany (\$39.2 billion), Bermuda (\$41.1 billion), France (\$39.2 billion), and Japan (\$38.2 billion). *U.S. Direct Investment Abroad*, Bureau of Economic Analysis, International Data, found at <http://www.bea.doc.gov/bea/di/dia-ctry.htm>; retrieved Aug. 16, 1999.

owned by U.S. firms.²⁹ Motor vehicles, aircraft, rail locomotives and rolling stock, computer hardware, semiconductors, and telephone equipment provided the bulk of U.S. production-sharing trade with Canada. U.S.-based companies account for a significant share of Canadian production in four of these six sectors.

Proximity of the U.S. and Canadian industrial heartlands, well-developed infrastructures, and transparent legal systems all contribute to the highly integrated nature of the U.S. and Canadian economies. In turn, this integration contributes to a high level of trade as each country is the other's largest foreign market and leading supplier of imported goods. Canada accounted for 22 percent (\$137.8 billion) of all U.S. exports in 1998 and 19 percent (\$174.7 billion) of all U.S. imports (table 1-3).

Motor vehicles and parts accounted for \$85.0 billion (28 percent) of total U.S.-Canada trade in 1998. The United States had a \$10.4 billion trade surplus with Canada in motor vehicle parts in 1998, but a \$24.3 billion deficit in finished vehicles (table 2-3). See chapter 3 for more discussion regarding production-sharing trade in motor vehicles and parts.

U.S. trade in aircraft with Canada (\$7.9 billion, or 3 percent of total U.S.-Canada trade in 1998) is primarily in commuter jets and aircraft engines and parts. Bombardier Aerospace Group--North America, which includes Canadair and de Havilland, is a world leader in the production of commuter jets. Bombardier operates 10 manufacturing and services facilities in Canada and a total of 7 facilities in the United States and Germany. U.S.-based Boeing has three production facilities in Canada that manufacture airplane wings and components.

Bombardier is also a major manufacturer of passenger railcars, and operates an assembly facility for mass transit cars in Vermont that was established to qualify the company for transit authority contracts under "Buy America" clauses. The heavier production operations (such as fabrication of the shells and attaching large parts and subassemblies) are performed in Quebec, with final assembly and finishing operations performed in Vermont. A substantial portion of the parts used in the assembly process in Quebec are of U.S. origin. For other rail products, General Motors' Electromotive Division (EMD) performs final assembly of its locomotives at its plant in London, Ontario. The headquarters administration, engineering, and parts manufacturing are in LaGrange, Illinois. U.S. exports of rail locomotives and rolling stock and related parts to Canada totaled \$1.0 billion in 1998, and U.S. imports from Canada, \$1.4 billion.

As Canada does not have a large semiconductor fabrication industry, U.S. content comprised a substantial share of the \$2.3 billion in U.S. imports of semiconductors from Canada in 1998. IBM fabricates semiconductor chips in facilities in the United States and performs final assembly in Bromont, Quebec. U.S. semiconductor trade with Canada amounted to \$4.9 billion in 1998, with the United States maintaining a bilateral trade surplus of \$406 million.

U.S.-Canada trade in telephone and telegraph apparatus totaled \$3.4 billion in 1998, of which U.S. imports exceeded exports by \$715 million. The high level of integration between the two countries in this sector is evident from the large share of trade comprised of parts, which accounted for 44 percent of U.S. telephone apparatus exports to Canada and 48 percent of U.S.

²⁹ U.S. Department of State, *Canada: Economic Policy and Trade Practices Report 1997*, submitted to the Senate Committees on Foreign Relations and on Finance, and to the House Committees on Foreign Affairs and Ways and Means, on Jan. 1998, p.1(latest data available).

Table 2-3
Canada: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by sector and digest groupings, 1995-98

(Million dollars)

Sector	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Motor vehicles	11,306	12,039	14,213	13,379
Certain motor-vehicle parts ¹	18,568	18,952	21,057	22,195
Computer hardware	4,771	5,019	5,404	5,158
Aircraft, space craft, and related equipment	1,303	1,455	1,432	1,667
Textiles, apparel, and footwear	2,749	2,933	3,411	3,539
Semiconductor devices	2,376	2,666	2,767	2,666
Telephone and telegraph apparatus	1,159	1,580	1,284	1,348
Aircraft engines and gas turbines	871	1,158	1,341	1,412
Rail locomotive and rolling stock	554	428	711	1,010
Molds and molding machinery	444	463	523	664
Miscellaneous machinery	1,034	1,111	1,212	1,040
Electrical circuit apparatus	2,058	2,144	2,119	2,179
All other	66,070	69,174	79,320	81,511
Total	113,261	119,123	134,794	137,768
U.S. imports for consumption:				
Motor vehicles	33,236	33,676	35,884	37,671
Certain motor-vehicle parts ¹	9,008	10,202	11,018	11,802
Computer hardware	4,057	3,450	3,497	3,545
Aircraft, space craft, and related equipment	1,482	2,191	2,738	3,473
Textiles, apparel, and footwear	2,107	2,520	2,962	3,297
Semiconductor devices	1,695	2,104	2,247	2,260
Telephone and telegraph apparatus	1,292	1,756	1,909	2,064
Aircraft engines and gas turbines	1,023	1,153	1,159	1,396
Rail locomotive and rolling stock	887	908	890	1,380
Molds and molding machinery	1,580	1,208	1,136	1,131
Miscellaneous machinery	730	782	886	1,094
Electrical circuit apparatus	944	940	1,039	1,032
All other	86,840	95,408	102,516	104,540
Total	144,882	156,299	167,881	174,685
U.S. merchandise trade balance:				
Motor vehicles	-21,931	-21,637	-21,671	-24,293
Certain motor-vehicle parts ¹	9,560	8,750	10,039	10,393
Computer hardware	713	1,569	1,907	1,614
Aircraft, space craft, and related equipment	-179	-736	-1,306	-1,806
Textiles, apparel, and footwear	641	413	449	242
Semiconductor devices	681	562	520	406
Telephone and telegraph apparatus	-133	-176	-625	-715
Aircraft engines and gas turbines	-152	5	182	16
Rail locomotive and rolling stock	-333	-479	-179	-370
Molds and molding machinery	-1,137	-745	-613	-467
Miscellaneous machinery	304	329	326	-55
Electrical circuit apparatus	1,114	1,205	1,080	1,147
All other	-20,770	-26,234	-23,196	-23,029
Total	-31,621	-37,176	-33,087	-36,918

¹ The products covered in this group include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, seats and parts, and miscellaneous parts and accessories. The category "certain motor-vehicle parts" in the tables in app. B does not include engines and parts, wiring harnesses, or seats and parts.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

sector imports in 1998. Sector imports and exports also consisted largely of transmission and switching equipment, as well as modems.³⁰ Nortel Networks (Nortel), the dominant Canadian telecommunications equipment³¹ manufacturer, has operated production facilities in the United States since 1972 and currently produces a variety of telecommunications products at several U.S. locations.³² Nortel originally invested in manufacturing plants in the United States to qualify for contracts that contained a “Buy America” clause, which were common in public utility supply contracts at the time. Nortel subsequently expanded its U.S. presence to serve the rapidly growing U.S. market for telecommunications equipment. Although Nortel has recently restructured its worldwide operations to reduce its vertical integration and increase its reliance on contract manufacturers, company officials indicate it will continue to produce telecommunications equipment in the United States, Canada, and Mexico.

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The Caribbean Basin³³

The bulk of goods manufactured in the Caribbean Basin region for export markets are assembled or sewn in export-processing zones. The components and production equipment used in the manufacturing processes are imported free of duty provided that the assembled articles are exported. Most of the industrial inputs are imported from the United States. Nearly all assembled goods exported to the United States enter at reduced duties or free of duty either under the Caribbean Basin Economic Recovery Act (CBERA) or under the production-sharing provisions of HTS Chapter 98. Other articles, particularly information technology products and semiconductors, enter unconditionally free of duty under the general or normal trade relations (NTR) column-1 rate.³⁴ The tabulation below shows that 1998 imports under the production-sharing tariff provisions accounted for 45 percent of U.S. imports from CBERA-eligible countries, whereas imports under CBERA accounted for 18 percent.

³⁰ Transmission equipment produces, amplifies, or transmits signals. Switching equipment directs phone calls or data from one point to another. Modems convert voice (analog) signals to digital signals and vice versa.

³¹ The telephone and telegraph apparatus sector is a subset of the more comprehensive telecommunications equipment industry.

³² Northern Telecom, *Northern Telecom: At Work in the United States*, 1995, p. 7.

³³ The Caribbean Basin includes countries and territories or successor political entities designated as beneficiary countries for purposes of the Caribbean Basin Economic Recovery Act (CBERA), including Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. These entities are eligible for preferential U.S. duty treatment under the CBERA and are designated by the President (see HTS general note 7(a)). The impact of imports under CBERA on the United States is the subject of a series of annual reports by the Commission; see *Caribbean Basin Economic Recovery Act and Andean Trade Preference Act: Impact on the United States*, USITC publication 3234, Sept. 1999.

³⁴ Although most semiconductors have entered free of duty under the Semiconductor Agreement since 1987, the bound rate of duty was not reduced to “Free” until 1999. Information technology products will become free of duty Jan. 1, 2000.

<u>Entry status</u>	<u>Value (million dollars)</u>	<u>Percent of total in 1998</u>
Production-sharing provisions	7,731	45
CBERA	3,161	18
Generalized System of Preferences	195	1
Other duty free	3,923	23
Other dutiable	<u>2,650</u>	<u>15</u>
Total imports ¹	17,124	100

¹ Imports valued at \$536 million entered under both HTS 9802.00.80 and CBERA in 1998. "Totals" are adjusted to avoid double counting. See USITC, *CBERA*, Sept. 1999, pp. 19f.

Although total U.S. imports from CBERA-eligible countries increased by an average annual rate of 15 percent during 1995-97, the rate of expansion slowed to 3 percent in 1997-98 (table 2-4). Among the leading suppliers of all U.S. imports from CBERA countries in 1998, Costa Rica registered the largest and fastest rate of growth among principal suppliers, with imports increasing by 18 percent (\$420 million) to \$2.7 billion in 1998.³⁵ The U.S. content of imports under the production-sharing provisions was \$4.9 billion, or 29 percent of total imports from CBERA countries.

Table 2-4
Caribbean Basin¹: U.S. imports for consumption, by leading sources, 1995-98

<u>Source</u>	<i>(Million dollars)</i>			
	1995	1996	1997	1998
Dominican Republic	3,385	3,582	4,308	4,445
Costa Rica	1,842	1,963	2,322	2,742
Honduras	1,441	1,797	2,320	2,544
Guatemala	1,515	1,694	1,984	2,071
El Salvador	813	974	1,345	1,436
Trinidad and Tobago	1,068	1,345	1,105	974
Jamaica	838	828	721	736
Nicaragua	238	349	439	453
All other	1,411	2,012	2,028	1,724
Total	12,550	14,545	16,572	17,124

¹ Includes only those Central American and Caribbean Countries and other political entities that are eligible under CBERA.

Note.—Because of rounding, figures may not add to the totals shown.

Source: Compiled from official statistics of the U.S. Department of Commerce.

³⁵ Significant growth in U.S. imports of certain electronic products offset a \$17 million decline in apparel imports from Costa Rica.

Among the leading manufactured goods imported from the region, apparel³⁶ accounted for \$8.3 billion (49 percent) of total U.S. imports from CBERA countries in 1998 (table 2-5); apparel also showed the largest increase in such U.S. imports, growing by \$691 million (9 percent) in 1998. Apparel is the only manufactured goods product category for which U.S. imports from CBERA countries exceeded imports from Mexico. Detailed coverage of apparel is provided in chapter 3.

Except for iron and steel products imported from Trinidad and Tobago, the only competitive source of steel in the region, most manufactured goods imported from CBERA countries are assembled entirely or in part from U.S.-made parts. In addition to apparel, six product areas recorded over \$100 million in U.S. imports in 1998. The Dominican Republic supplied over 71 percent of total imports for four of the six product areas (medical goods, footwear and parts, electric circuit apparatus, and precious jewelry and related articles). Costa Rica supplied virtually all printed circuit assemblies, and telephone and telegraph apparatus.³⁷ Important recent developments in these six product areas are highlighted below.

Medical Goods

U.S. imports of medical goods from CBERA countries increased by \$30 million (8 percent) to \$389 million in 1998. The Dominican Republic accounted for 82 percent of such imports in 1998. U.S.-based companies with assembly facilities in these countries have used the CBERA, GSP, and production-sharing provisions to reduce customs duties when the final assembled goods are imported into the United States,³⁸ although the principal reason for production in the Caribbean Basin region is to reduce labor costs. In response to pressures by government and private sector health care insurers to contain rapidly increasing health care costs, U.S. suppliers of highly price-sensitive hospital consumables have reduced manufacturing costs to maintain their competitiveness.³⁹ Several large U.S. medical manufacturers, including Baxter International, Johnson & Johnson, Abbott Laboratories, and Becton Dickinson, have established significant production-sharing operations in the Dominican Republic to take advantage of relatively low wage rates and thereby reduce costs of assembling U.S.-made components into finished medical goods, while maintaining production of more capital-intensive medical goods in the United States.

In 1994, U.S.-based Baxter International moved a significant portion of its assembly of price-sensitive, commodity hospital products from Singapore to Costa Rica. Rising wages in

³⁶ Includes apparel of textile materials, such as cotton, wool, manmade fiber, or silk fabrics, and nontextile materials, such as fur, leather, and plastics. Excluded are nonwoven (disposable) garments.

³⁷ Costa Rica also supplied 92 percent of imports of semiconductor devices from CBERA countries in 1998.

³⁸ U.S. industry representatives, telephone interviews by USITC staff, July 28, 1997.

³⁹ This has particularly had an effect on major suppliers of commodity hospital supplies such as bougies, catheters, drains, disposable surgical trays, and blood transfusion and collection equipment. However, such cost pressures have also affected producers of certain more specialized respiratory, dental, and electrodiagnostic equipment. Products imported under production-sharing provisions from the Dominican Republic include blood and plasma transfusion products, blood collection sets, solution administration sets, sterile feeding tubes, and certain dental supplies. Representatives of Dominican Republic subsidiaries of U.S. companies, telephone interviews by USITC staff, June 16, 1997.

Table 2-5

Caribbean Basin¹: U.S. imports for consumption, by leading manufactured products and suppliers, 1995-98

Commodity group	1995	1996	1997	1998	Leading suppliers (<i>Percent of 1998 total</i>)
----- <i>Million dollars</i> -----					
Apparel ²	5,461	6,042	7,616	8,307	Dominican Republic (28), Honduras (23), El Salvador (14), Guatemala (14), Costa Rica (10)
Medical goods	319	247	359	389	Dominican Republic (82), Costa Rica (17)
Microprocessor boards	1	(³)	1	347	Costa Rica (100) ⁴
Footwear and parts	283	300	336	325	Dominican Republic (87), Honduras (6)
Electric circuit apparatus	169	196	251	284	Dominican Republic (84), Costa Rica (5), St. Kitts and Nevis (5)
Precious jewelry and related articles	181	189	204	224	Dominican Republic (71), Costa Rica (20), Netherlands Antilles (7)
Telephone and telegraph apparatus	12	47	116	124	Costa Rica (96)
Steel mill products	81	75	86	77	Trinidad and Tobago (93)
Miscellaneous rubber or plastic products	74	70	64	73	Costa Rica (55), Dominican Republic (30), Guatemala (7)
Luggage, handbags, and flat goods	40	49	65	72	Dominican Republic (48), Costa Rica (38), El Salvador (8), Honduras (5)
Electrical capacitors and resistors	77	66	84	67	El Salvador (34), Costa Rica (33), Barbados (16), Dominican Republic (10)
Furniture	49	52	61	66	Honduras (56), Costa Rica (21), Guatemala (11), Dominican Republic (8)
Electric transformers	27	35	48	46	Dominican Republic (57), Costa Rica (20), El Salvador (5), Honduras (5), Haiti (4)
Semiconductor devices	3	4	8	45	Costa Rica (92), Dominican Republic (6)
Electric sound and visual apparatus	46	47	55	42	Dominican Republic (100) ⁴
All other, including non-manufactured goods	5,727	7,026	7,219	6,636	Costa Rica (17), Dominican Republic (14), Guatemala (14), Trinidad & Tobago (13), Honduras (9)
Total	12,550	14,545	16,572	17,124	Dominican Republic (26), Costa Rica (16), Honduras (15), Guatemala(12), El Salvador (8)

¹ Includes only those Central American and Caribbean Basin countries and other political entities that are eligible under CBERA.

² Includes apparel of both textile materials, such as cotton, wool, manmade fibers, or silk fabrics, and nontextile materials, such as fur, leather, and plastics. Excluded are nonwoven (disposable) garments.

³ Less than \$0.5 million.

⁴ Actually 99.8 percent.

Note.—Because of rounding, figures may not add to the totals shown.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Singapore and the advantage of Costa Rica's proximity to the United States caused the shift.⁴⁰ Abbott Laboratories has also established assembly facilities in Costa Rica, with production of disposable medical goods expected to commence in December 1999.⁴¹

Microprocessor Boards

U.S. imports of printed circuit assemblies for computers⁴² increased sharply from \$1 million in 1997 to \$347 million in 1998, virtually all from Costa Rica. The bulk of these components were assembled by Intel, which began production at its Costa Rican facilities in March 1998. Intel built its microprocessor assembly and testing complex at a reported cost of \$500 million, providing employment for 2,100 workers as of June 1999.⁴³ Intel's investment was the culmination of a Costa Rican Government effort that began 15 years ago to transform the economy away from agricultural products to one centered on higher value-added, technology-oriented, and environment-friendly goods and services. Factors reported to have influenced the decision of Intel and other high-technology companies to invest in Costa Rica include political, economic, and legal stability; a highly skilled, productive, and educated workforce;⁴⁴ and relative lack of poverty, social conflict, and corruption compared with certain countries in Latin America.⁴⁵

Footwear and Parts

Although U.S. imports of footwear and parts from CBERA countries historically have consisted primarily of stitched shoe uppers, in recent years the composition has shifted toward finished footwear. Of total U.S. imports of \$325 million in 1998, approximately two-thirds entered under the CBERA. Prior to the passage of section 222 of the 1990 Caribbean Economic Recovery Expansion Act, duty-free entry of finished footwear had not been allowed under either the CBERA or GSP. That act allowed duty-free entry of such articles from CBERA countries if they were assembled entirely from U.S. components, spurring growth to about one-fifth of total U.S. imports of footwear and parts in 1998. Because the manufacture of finished footwear and footwear uppers is labor-intensive, U.S. producers ship components to low-wage CBERA countries to perform labor-intensive assembly operations to become more price competitive with imports from Asia, primarily China.⁴⁶ The Dominican Republic was by far the leading supplier of footwear and parts from CBERA countries in 1998, accounting for \$284 million (87 percent) of U.S. imports from the region, followed by Honduras.

⁴⁰ Representatives of Costa Rican subsidiary of Baxter Healthcare, interview by USITC staff, Cartago, Costa Rica, May 20, 1997.

⁴¹ U.S. Embassy and Costa Rican industry officials, interviews by USITC staff, June 11, 1999.

⁴² Technically, certain parts for machines of HTS heading 8471.

⁴³ Intel representative, telephone interview by USITC staff, June 14, 1999, and Sept. 23, 1999.

⁴⁴ Ibid.; U.S. Embassy and Costa Rican industry officials, interviews by USITC staff, June 11, 1999.

⁴⁵ Serge F. Kovaleski, "High Technology's Top Banana? Costa Rica Lures Intel, Other Industry Giants," *Washington Post*, Mar. 11, 1998, p. C10.

⁴⁶ China supplied 58 percent of the total value of U.S. imports of footwear and parts and 73 percent of the total quantity of footwear in 1998.

Electrical Circuit Apparatus

Total U.S. imports of electrical circuit apparatus from CBERA countries grew by \$33 million (13 percent) to \$284 million in 1998, of which the Dominican Republic supplied 84 percent. Virtually all U.S. imports from CBERA countries entered duty free either under the CBERA, GSP, or production-sharing provisions in 1998. Both Rockwell Automation/Allen-Bradley⁴⁷ and Control Devices⁴⁸ assemble electrical circuit apparatus in free-trade zones in the Dominican Republic for export to the United States.

Precious Jewelry and Related Articles

Total U.S. imports of precious jewelry from CBERA countries increased by \$20 million (10 percent) to \$224 million in 1998. Virtually all U.S. imports of such articles from the Dominican Republic entered free of duty under either the CBERA or production-sharing provisions. To reduce labor costs and improve their ability to compete with imports from Asia and Italy, several U.S. producers of precious jewelry have established assembly operations in the Dominican Republic, by far the leading supplier, and to a lesser extent in Costa Rica and the Netherlands Antilles. The bulk of U.S. imports of precious metal jewelry from these countries is believed to be gold chain made in the United States to which clasps are attached in the Caribbean Basin.

Telephone Apparatus

U.S. imports of telephone apparatus, virtually all from Costa Rica, approximately tripled during 1996-98, reaching \$124 million. Virtually all of these imports entered free of duty under the CBERA. Most of this growth can be attributed to imports of parts of telephonic switching equipment, which comprised 88 percent of the total during 1998. Alcatel USA (a U.S. subsidiary of an EU-headquartered company), which opened a manufacturing plant in a San Jose free-trade zone in 1996, is the principal source for these imports. Alcatel's Costa Rican production facility provides switch components to customers throughout the world.⁴⁹ Alcatel U.S.A. is a major U.S. producer of both wireless and wireline telephonic switching equipment with production facilities in the United States, Europe, and Latin America.

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⁴⁷ 1999 *Caribbean/Latin America Profile* (Grand Cayman, Cayman Islands: Caribbean Publishing Co., Ltd., 1998), pp. 99 and 103. Allen-Bradley representative, telephone interview with USITC staff, Oct. 14, 1999.

⁴⁸ Control Devices, Inc., 10-K filing to the Securities and Exchange Commission, Feb. 2, 1999.

⁴⁹ DSC Communications, "DSC Establishes New Manufacturing Facility In Costa Rica," press release, Mar. 21, 1996, found at Internet address <http://192.245.102.10/pr032196.htm>, retrieved Sept. 22, 1999. Alcatel acquired DSC Communications in Aug. 1998.

CHAPTER 3

CROSS-BORDER MANUFACTURING IN SELECTED INDUSTRIES

The North American automotive, television, and apparel industries are among the sectors most active in the cross-border flow of parts and finished goods. These three sectors accounted for 24 percent of U.S. exports to Canada, Mexico, and the Caribbean Basin region in 1998, and for 33 percent of U.S. imports from these trading partners (table 1-3). By comparison, trade in these sectors accounted for 5 percent of U.S. exports to the rest of the world and 16 percent of U.S. imports. This chapter examines the integration of these industries in North America and the Caribbean Basin.

Data available on U.S., Canadian, and Mexican output and employment for these sectors¹ are provided in table 3-1. Although these data are not, in all cases, directly comparable to the product groupings defined in the chapter, they nonetheless assist in understanding general industry trends during 1995-98. Producers' shipments increased in most sectors during this period, especially in the automotive sectors. Employment was more variable, declining in certain sectors despite increased shipments. All three North American Free-Trade Agreement (NAFTA) partners experienced significant increases in both producers' shipments and employment in the motor vehicle parts sector. A variety of factors are likely to have influenced these trends, such as sustained economic growth in the NAFTA region, technological innovations, exchange rate fluctuations, developments associated with NAFTA and the Uruguay Round, and the recent Asian financial crisis. Therefore, changes in output and employment levels in the NAFTA countries during 1995-98 are difficult to link with any single economic development, including the ongoing integration of North American industry. Such analysis is beyond the scope of this report.

Motor Vehicles and Parts

The automotive sector is the most integrated manufacturing sector in North America, accounting for 40 percent of North American trade.² The integration of U.S. and Canadian automotive production, spurred decades ago by the Automotive Products Trade Act of 1965 (APTA), has resulted in significant production rationalization,³ intra-industry trade, and trade in intermediate goods. Production-sharing arrangements have encouraged similar regional integration with Mexico. Prior to NAFTA, Mexican import restrictions led U.S. automakers and parts producers to maintain production in Mexico that was redundant with production elsewhere in North America. However, the gradual removal of Mexican import barriers under NAFTA has

¹ Including major household appliances discussed in chapter 2.

² Sidney Weintraub and Christopher Sands, eds., *The North American Auto Industry Under NAFTA* (Washington, DC: Center for Strategic Studies, 1998), Significant Issues Series, vol. XX, No. 5, p. xi.

³ With respect to motor vehicles, rationalization refers to a strategy whereby vehicle models are produced in a single or reduced number of locations for distribution throughout a wide region.

Table 3-1
Trends in producers' shipments and employment in selected industry sectors in the United States, Canada, and Mexico, 1995-98

Country/sector	1995	1996	1997	1998
United States:				
Motor vehicles: ¹				
Producers' shipments (<i>million dollars</i>) ²	209,035	209,184	209,272	216,702
Employment (<i>1,000 employees</i>) ²	278	263	272	269
Motor-vehicle parts: ³				
Producers' shipments (<i>million dollars</i>) ²	143,859	148,201	159,202	163,819
Employment (<i>1,000 employees</i>) ²	706	691	739	738
Color television receivers:				
Producers' shipments (<i>million dollars</i>) ⁴	5,145	4,650	4,200	3,800
Employment (<i>1,000 employees</i>) ⁴	20	16	14	12
Color picture tubes:				
Producers' shipments (<i>million dollars</i>) ⁵	2,700	3,050	3,450	3,250
Employment (<i>1,000 employees</i>) ⁶	19	19	20	20
Textile mill products:				
Producers' shipments (<i>million dollars</i>) ⁴	79,892	80,196	83,906	80,944
Employment (<i>1,000 employees</i>) ⁴	663	626	616	596
Apparel:				
Producers' shipments (<i>million dollars</i>) ⁷	78,073	77,564	78,782	80,014
Employment (<i>1,000 employees</i>) ⁷	936	864	813	763
Major household appliances: ⁸				
Producers' shipments (<i>million dollars</i>) ⁹	11,259	11,725	11,253	11,632
Employment (<i>1,000 employees</i>) ¹⁰	69	69	60	63
Canada:¹¹				
Motor vehicles: ¹²				
Producers' shipments (<i>million dollars</i>)	37,647	37,652	41,141	39,993
Employment (<i>1,000 employees</i>)	66	68	67	72
Motor-vehicle parts and accessories: ¹³				
Producers' shipments (<i>million dollars</i>)	16,369	17,333	18,117	18,108
Employment (<i>1,000 employees</i>)	86	83	92	100
Color television receivers:				
Producers' shipments (<i>million dollars</i>) ¹⁴	203	177	179	174
Employment (<i>1,000 employees</i>)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
Color picture tubes:				
Producers' shipments (<i>million dollars</i>) ¹⁴	0	0	0	0
Employment (<i>1,000 employees</i>)	0	0	0	0
Textiles:				
Producers' shipments (<i>million dollars</i>)	4,945	5,069	5,335	4,973
Employment (<i>1,000 employees</i>)	46	48	51	54
Apparel:				
Producers' shipments (<i>million dollars</i>)	4,760	4,618	4,731	4,474
Employment (<i>1,000 employees</i>)	84	85	88	90
Major household appliances: ¹⁶				
Producers' shipments (<i>million dollars</i>)	689	646	675	712
Employment (<i>1,000 employees</i>)	7	6	5	5

See footnotes at end of table.

Table 3-1--Continued
Trends in producers' shipments and employment in selected industry sectors in the United States, Canada, and Mexico, 1995-98

Country/sector	1995	1996	1997	1998
Mexico¹⁷				
Motor vehicles: ¹⁸				
Producers' shipments (<i>thousands of units</i>)	935	1,219	1,360	1,455
Employment (<i>1,000 employees</i>)	42	44	49	50
Motor-vehicle parts and accessories: ¹⁹				
Producers' shipments (<i>million dollars</i>)	13,095	16,175	18,557	20,130
Employment (<i>1,000 employees</i>)	253	279	321	336
Color television receivers:				
Producers' shipments (<i>million dollars</i>) ¹⁴ . . .	3,200	3,150	3,339	3,539
Employment (<i>1,000 employees</i>)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
Major household appliances:				
Producers' shipments (<i>thousands of units</i>) ²⁰	2,188	2,256	3,019	3,419
Employment (<i>1,000 employees</i>)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)

¹ Includes motor vehicles and car, truck, and bus bodies: SIC nos. 3711 and 3713.

² U.S. Department of Commerce, *U.S. Industry & Trade Outlook '99*, employment estimates by the Commission for 1997-98 based on data from U.S. Department of Labor, Bureau of Labor Statistics.

³ Includes automotive stampings (SIC 3465); carburetors, pistons, piston rings, and valves (SIC 3592); vehicle lighting equipment (SIC 3647); storage batteries (SIC 3691); electrical equipment for internal combustion engines (SIC 3694); and motor vehicle parts and accessories (SIC 3714).

⁴ U.S. International Trade Commission, *Shifts in U.S. Merchandise Trade in 1998*, Appendix B, USITC Pub. 3220, Aug. 1999.

⁵ Electronic Industries Alliance.

⁶ Electronic Industries Alliance and U.S. Department of Commerce.

⁷ For textile mill products (SIC 22) and apparel and other textile products (SIC 23), shipments data represent industry shipments data (seasonally adjusted) and are from the U.S. Bureau of the Census, e-mail of Apr. 22, 1999, and employment data are from the U.S. Bureau of Labor Statistics, found at Internet address <http://146.4.24/cgi/bin/dsrsv>, retrieved Nov. 3, 1999.

⁸ Includes household cooking equipment (SIC 3631); refrigerators and farm freezers (SIC 3632); household laundry equipment (SIC 3633 (pt.)) and household appliances, n.e.c. (SIC 36399(pt.)).

⁹ U.S. Department of Commerce, *Current Industrial Reports*, Pub. MA36F(97)-1, issued Aug. 25, 1998, revised Sept. 23, 1999.

¹⁰ Estimated by the Commission based on official statistics of the U.S. Department of Labor, Bureau of Labor Statistics.

¹¹ Except as noted, all producers' shipments and employment data for Canada were extracted from CANSIM, Statistics Canada's online statistical database. Value of producers' shipments reported in Canadian dollars were converted to U.S. dollars by the U.S. International Trade Commission. Figures on employment were derived by calculating the average for the year from monthly data available from CANSIM. Found at Internet address <http://www.statcan.ca/datawarehouse/znxim/cansim.cgi>, retrieved Oct. 21 and 22, 1999.

¹² Includes truck trailers, which are not included in U.S. data for motor vehicles. Truck trailers account for about 3 percent of total Canadian shipments of motor vehicles.

¹³ Includes motor-vehicle fabric accessories, which are not included in U.S. motor-vehicle parts data. Excludes storage batteries, which are included in U.S. motor-vehicle parts data.

¹⁴ Reed Electronics Research, *Yearbook of World Economics Data, 1999/2000*. Values reported in U.S. dollars.

¹⁵ Not available.

¹⁶ Includes room air conditioners and food waste disposers, which are not included in U.S. data for major household appliances.

¹⁷ Data for producers' shipments and employment are not available for sectors other than motor vehicles and parts and color television receivers. The most recent official data from Mexico's census of manufactures is for production in 1994; data for 1998 will be available in the middle of 2000.

¹⁸ Grupo CIEMEX-WEFA, *Perspectivas Economicas de la Industria Automotriz*, Vol. XX, Num. 2, July 1999.

¹⁹ *Ibid.* Covers products classified in Mexico's industrial sector "Rama 57," including engines, transmissions, suspensions, brakes, and other parts and systems used in the assembly of motor vehicles. Value of producers' shipments reported in Mexican pesos were converted to U.S. dollars by the U.S. International Trade Commission.

²⁰ Data represents Mexico's producers' shipments of refrigerators, gas ranges, and washers. There is no domestic production of electric dryers or stoves in Mexico at this time.

prompted U.S. automakers and parts producers to rationalize production by exporting to Mexico those vehicles and parts that are more efficiently produced in the United States or Canada. This rationalization has allowed U.S. automakers and parts producers in Mexico to modernize their existing operations, and to focus on core competencies to improve economies of scale and ultimately increase competitiveness. U.S., Japanese, and European auto and parts producers have in recent years invested considerably in new and existing assembly plants throughout North America, increasing market integration and the North American manufacturing base.

Industry Profiles

The U.S. passenger vehicle⁴ manufacturing industry consists of traditional U.S. producers General Motors (GM), Ford, and the newly merged DaimlerChrysler (DC), plus a number of “transplant” producers based in Japan and Germany. Medium- and heavy-duty truck makers include Ford, GM, Paccar, Navistar International, Freightliner (a unit of DC, Germany), Mack Trucks (a unit of Renault, France), and Volvo Trucks North America (Sweden). In 1998, the U.S. passenger vehicle industry produced 11.6 million vehicles, a 1-percent decrease from 1997. The slight decrease in total 1998 U.S. production was largely attributable to a 54-day strike at GM. Of total U.S. passenger vehicle production in 1998, Japanese manufacturers with operations in the United States (Honda, Mazda, Mitsubishi, Nissan, Subaru-Isuzu, and Toyota) produced 2.4 million vehicles (21 percent), and German automakers BMW and Mercedes-Benz produced 127,600 units (1 percent). U.S. passenger vehicle sales reached a total of 15.6 million units in 1998, with imports from outside North America supplying 30 percent of the market.⁵

GM, Ford, and DC dominate Canadian motor vehicle production, with a combined capacity of over 2 million vehicles per year.⁶ Other motor vehicle producers with operations in Canada include Honda, Toyota, Volvo,⁷ CAMI (GM’s joint venture operation with Suzuki), and truck makers Navistar, Kenworth, Mack, and Freightliner. Due to strong demand in the Canadian and U.S. markets, the Canadian auto industry has operated at record production levels for a number of years, with producers adding shifts and announcing production capacity expansions in 1998.⁸ The Canadian operations of Ford, Chrysler, Honda, Toyota, and Volvo recorded increased

⁴ Passenger vehicles refer to passenger cars and light trucks (minivans, sport-utility vehicles, and pickup trucks). This report will primarily discuss the growing integration of the North American industry manufacturing passenger vehicles and related parts, although the tables presented herein provide data for all motor vehicles, which includes passenger cars, light trucks, medium- and heavy-duty trucks, buses, and bodies and chassis of the foregoing.

⁵ Automotive News, *‘99 Market Data Book* (Detroit, MI: Crain Communications, Inc., May 1999), p. 35.

⁶ Max Pemberton and David Puckering, *Ward’s/Pembertons World Auto Atlas and Directory* (Southfield, MI: Ward’s Communications, 1998), p. 54.

⁷ In late 1998, Volvo announced the closing of its plant in Halifax, Nova Scotia. The reasons given by Volvo include the reduction of automotive tariffs in Canada that spurred the opening of the Canadian plant in 1963; overcapacity in Sweden; costs involved in shipping parts for assembly, as opposed to shipping a finished vehicle; and the inability to expand production at Halifax. Volvo asserts that the establishment of a new plant in Mexico is not related to the closing of its Halifax facility; the Mexican operation will focus on buses for the present time, with limited passenger car production destined exclusively for the Mexican market. Jim Henry, “Strikers at Volvo Canada trade plant for severance,” *Automotive News*, Nov. 2, 1998, p. 39.

⁸ Jeff Green, “Rolling Steady: Canada faces slowdown at home, hope abroad,” *Ward’s Auto World*, Dec. 1998, p. 73.

passenger car production in 1998, with only GM and its CAMI joint venture recording production decreases due to a strike at GM and related shutdowns at CAMI and GM's Ste. Therese, Quebec plants.⁹ In 1998, retail sales of passenger cars and light trucks in Canada reached 1.4 million units, with imports from outside North America accounting for 15 percent of the market.¹⁰

The Mexican passenger vehicle manufacturing industry produced 1.36 million vehicles in 1998, an increase of 8 percent over the 1997 total. Although Volkswagen dominates passenger car manufacturing in Mexico (accounting for 36 percent of the 1998 total), DC surpasses Volkswagen when passenger cars and light trucks are considered together (accounting for 25 percent of total passenger vehicle production in 1998). Other passenger vehicle manufacturers with operations in Mexico, listed by magnitude of production, are GM, Nissan, Ford, Honda, and BMW. Medium- and heavy-duty truck manufacturers include DC (Chrysler, Mercedes-Benz, and Freightliner brands), Dina, Ford, Kenworth, GM, Navistar, Scania (Sweden), Trailers de Monterrey (Mexico), Victor Patron (Mexico), and Volvo. Passenger vehicle sales in Mexico reached 565,869 vehicles in 1998, with imports from all countries accounting for 31 percent of the market.¹¹

The North American automotive parts industry has a structure similar to that for motor vehicles, with the output of automotive parts¹² concentrated in the United States, where roughly 5,000 firms manufactured parts valued at an estimated \$157 billion in 1998.¹³ In the same year, output from approximately 1,000 Mexican component producers ranged between \$44 billion to \$56 billion,¹⁴ and Canadian shipments from 550 plants totaled \$23 billion.¹⁵ These components include those destined for the original equipment manufacturers market (the automakers) as well as those shipped to the aftermarket for use as replacement parts. The leading suppliers to the North American market include Delphi Automotive Systems,¹⁶ the world's largest automotive parts supplier, with sales of \$20.6 billion; Visteon Automotive Systems, a unit of Ford, with sales of \$14.5 billion; and Johnson Controls, Inc., a supplier of interior systems and batteries, with sales of \$5.6 billion.¹⁷

North American Manufacturing Integration

Although market access and labor cost considerations have long spurred U.S. and foreign automotive investment in Canada and Mexico, duty-free trade in most motor vehicles and parts between the United States and Canada under the Automotive Products Trade Agreement of 1965 (APTA) heralded the beginning of true integration of the North American automotive industry. That same year, the Mexican Congress approved the Border Industrialization Program (Maquiladora Program), allowing duty-free entry of components and materials used to assemble

⁹ "Civic Wins First Canada Car Crown; Year Flat," *Ward's Automotive Reports*, Jan. 25, 1999, p. 1.

¹⁰ '99 *Market Data Book*, p. 40.

¹¹ *Ibid.*

¹² Because of differences in definition among various sources, data for the product grouping "auto parts" provided throughout this write-up may not be directly comparable.

¹³ U.S. Department of Commerce, International Trade Administration, "Automotive Parts," *Outlook '99*, 1999, pp. 37-1 and 37-5.

¹⁴ *Mexico - Automotive Aftermarket Parts - ISA981101*, Market Research Reports, U.S. Department of State, Nov. 1, 1998.

¹⁵ *The Canadian Automotive Industry*, Industry Canada, June 10, 1998, found at Internet address <http://strategis.ic.gc.ca/SSG/am01153e.html>, retrieved July 6, 1999.

¹⁶ General Motors spun off Delphi, its parts division, in May 1999.

¹⁷ "Top 150 OEM Parts Suppliers to North America," *Automotive News*, Apr. 12, 1999, pp. 21-26.

vehicles and parts (as well as nonautomotive products) for export markets. Subsequent trade agreements--the U.S.-Canada Free Trade Agreement (CFTA) and NAFTA--liberalized trade and investment rules, thereby encouraging the rationalization of production and contributing to the competitiveness of the North American automotive industry. Improved market access within North America further enhanced competitiveness by allowing greater economies of scale.

Rationalization strategies tend to have the Canadian facilities of GM, Ford, and DC more heavily weighted towards the production of midsized and larger passenger cars and light trucks for domestic consumption and export (mostly to the United States). With respect to passenger cars, the sole North American site for production of the Chrysler-branded Concorde, LHS, and 300M, and the Dodge Intrepid is Bramalea, Ontario. St. Thomas, Ontario, is the sole North American production facility for the Ford Crown Victoria and the Mercury Grand Marquis. GM's facilities in Oshawa, Ontario, and Ste. Therese, Quebec, are the sole North American production sites for the Chevrolet Lumina, Monte Carlo, Impala,¹⁸ and Camaro; the Buick Regal and Century; and the Pontiac Firebird.¹⁹

For light trucks, DC's operations in Windsor, Ontario, represent the sole North American production facilities for the Dodge Ram Van and Ram Wagon, and complement U.S. production of the Dodge Caravan/Grand Caravan and the Plymouth Voyager/Grand Voyager minivans. Ford's Oakville, Ontario, factories are the sole North American production facilities for the Ford Windstar minivan, and complement U.S. production of the Ford F-series truck. GM's Oshawa, Ontario, plant is the sole North American production site for the extended cab version of the Chevrolet Silverado pickup and a complementary site for the GMC Sierra extended cab pickup.²⁰

The market access provisions of NAFTA have encouraged automakers to accelerate the pace of model rationalization among their North American operations, and to consider their Mexican operations as part of their regional and global production planning. More specifically, automakers are concentrating Mexican production on small cars for both local consumption and export, while exporting larger, luxury vehicles to the Mexican market. However, the degree of integration between the Mexican and U.S. industries has not yet reached the level of that between the U.S. and Canadian industries. Many of the passenger car and light truck models produced by GM, Ford, and DC in Mexico continue to be produced elsewhere in North America. Nissan has recently moved toward fuller integration of its North American operations with its decision to move production of the Sentra from Smyrna, Tennessee, to Aguascalientes, Mexico, during 1997-99, with a view toward using freed up U.S. capacity for a redesigned pick-up and an all new sport-utility vehicle (SUV).²¹ Volkswagen's only North American production site is in Puebla, Mexico, where the popular Beetle, Jetta, and Golf models are produced. Similarly, the sole North American production sites for the Sebring convertible and Dodge Ram pickup (DC), Ford Escort ZX2 sport coupe, and the 2-door Chevy Tahoe/GMC Yukon (GM) are in Mexico. Automakers are also using their Mexican plants to supplement the U.S. production of vehicles in high demand in the United States, especially pickup trucks and SUVs.

U.S. and foreign parts suppliers have followed their automotive customers throughout the North American market in response to industry shifts to localized production, just-in-time

¹⁸ New for model year 2000.

¹⁹ '99 Market Data Book, p. 23.

²⁰ Ibid., p. 25.

²¹ Miller, *The Road Ahead*.

deliveries, increased local content, sourcing diversity, smaller supplier bases, and greater modularity. In the United States, for example, approximately 500 component manufacturers are subsidiaries of Japanese, Canadian, and European firms.²² In Mexico, the establishment of assembly operations by Japanese and German automakers has attracted investments from their parts suppliers, providing greater competition for U.S.-based suppliers that have traditionally dominated the Mexican market.²³ Canadian-based suppliers, on the other hand, reportedly now account for more than one-half of Canadian automotive parts production, after decades of dominance by U.S.-based firms.²⁴ Japanese parts makers have increased their presence in the Canadian market, but have yet to challenge the strong positions held by Canadian and U.S. firms.

Although both the Mexican and Canadian components industries produce a broad spectrum of automotive parts, the Mexican industry has traditionally emphasized the production and export of more labor-intensive components,²⁵ in part because of Mexico's lower labor costs. Mexico has developed competencies in the labor-intensive manufacture of engine castings and wiring harnesses. Mexico has emerged as one of the world's leading producers of engine castings, with such firms as Montupet, Nematik SA, and Teksid manufacturing cylinder blocks and heads for U.S. and foreign vehicle manufacturers.²⁶ Most wiring harnesses for the North American automotive industry are assembled in Mexico by Delphi Packard Electric, Lear Corp., Yazaki North America Inc., Sumitomo Electric Wiring Systems, and Lenische Cable Assemblies. More complex and costly parts, such as transmissions, are expected to be produced in Mexico in the future.²⁷ The Canadian industry, on the other hand, has focused on expanding the manufacture of higher value-added components and modules by directing investment during the 1990s to machinery and equipment purchases designed to enhance productivity and overall competitiveness.²⁸

North American Automotive Investment Trends

There has been considerable investment by U.S., Japanese, and European automakers in new and existing assembly plants throughout North America in recent years, resulting in the introduction of new models and the expansion of capacity for existing popular models. According to a 1998 study conducted by the Automotive Parts Manufacturers Association of Canada, the United States continues to be the leading recipient of automotive investment in the world, with Canada ranking ninth and Mexico, tenth.²⁹

²² "Automotive Parts," *Outlook '99*, p. 37-1.

²³ U.S. Department of State, *Mexico - Automotive Original Eq. Manufacturers - ISA970801*, Market Research Report, Aug. 1, 1997.

²⁴ John Couretas, "Canada Parts Makers Steer A Global Course," *Automotive News*, May 5, 1997, p. 27.

²⁵ John Couretas, "Big Mexican Suppliers Glide as Small Parts Makers Slide," *Automotive News*, June 1, 1998, p. 20.

²⁶ For example, see Al Wrigley, "Mexico Captures Ford Pact," *American Metal Market*, Apr. 6, 1998, p. 1; and Al Wrigley, "Mexican Casting Grows Stronger," *American Metal Market*, May 19, 1998.

²⁷ Al Wrigley, "Auto Industry Has Much to Overcome in Mexico," *American Metal Market*, July 2, 1998, p. 4.

²⁸ Carlos Gomes, "Auto Parts Suppliers --Outsourcing Drives Surge in Canadian Content," *Canadian Auto Report*, Scotia Economics, Feb. 25, 1999.

²⁹ U.S. Department of Commerce, International Trade Administration, Office of Automotive Affairs, *Fifth Annual Report to Congress Regarding the Impact of the North American Free Trade Agreement*

(continued...)

With respect to Mexico, the Economist Intelligence Unit (EIU) estimates that foreign direct investment by automakers in the Mexican automotive industry will reach at least \$2 billion per year for the next several years. Announcements by Mexico's leading automakers of plans to increase capacity indicate that Mexico is increasingly crucial to their North American strategies of reducing labor costs, improving manufacturing efficiencies, expanding shares of the North American market, and increasing sales in Central and South America from their Mexican production facilities (table 3-2).³⁰ For example, GM may be planning to double its manufacturing capacity in Mexico by 2007, possibly including a new plant for a new SUV by late 2000. The majority of these vehicles would be destined for the U.S. market. A new full-size pick-up may also be added to the Silao plant line in late 2000.³¹

Table 3-2
Motor vehicles: Selected investments in Mexico

Manufacturer	Capacity expansion/investment plans in Mexico
DaimlerChrysler	Will begin production of the PT Cruiser in Toluca in January 2000 - will build 100,000 per year for global distribution. In 1998, DC completed the addition of a metal stamping facility in Saltillo. Overall, DC has committed \$1.5 billion to revamp its Mexican operations by 2002.
Ford	Will replace the Tracer and Escort with the all-new Focus in 1999 and will stop production of the Contour/Mystique to make room for output of the Focus. In 1999, Ford plans to outfit its Cuautitlan plant with new machinery. Overall, Ford has committed \$1 billion to expand its Mexican operations.
Freightliner	Will double Class 8 heavy truck production at Santiago plant for export to the United States.
General Motors	Committed \$20 million in 1998 to build a vehicle prototype design center in Toluca that will work on projects for the entire corporation.
Navistar	Began manufacturing 3 models of Class 6-8 trucks and buses near Monterrey in 1998 for domestic consumption as well as for export to the United States and Latin America.
Nissan	Moved production of the Sentra from Smyrna, TN, to Aguascalientes in 1999, making Aguascalientes the sole source for the Sentra in North and South America.
Volkswagen	Began production of the new Beetle at the VW plant in Puebla in 1998; this is the sole production facility for this vehicle in the world.
Volvo AB	Bought Mexicana de Autobuses (Mexico's second-leading bus manufacturer) in October 1998 with plans to enhance its presence as a NAFTA producer of buses as well as passenger cars. The Tultitlan plant will begin producing the S70 and V70 passenger cars in 1999.

Sources: EIU, *Motor Business International*, 2nd quarter 1999, chs. 1 and 5; and Office of Automotive Affairs, U.S. Department of Commerce, *Fifth Annual Report to Congress Regarding the Impact of the North American Free Trade Agreement upon U.S. Automotive Trade with Mexico*, July 1999.

²⁹ (...continued)

upon *U.S. Automotive Trade with Mexico*, July 1999, found at <http://www.ita.doc.gov/auto/nafta99.pdf>.

³⁰ EIU, 2d quarter 1998, p. 52.

³¹ EIU, 2d quarter 1999, p. 70.

years.³² Large Mexican suppliers will likely be active participants in this growth as they seek to better position their companies to compete in an automotive market requiring systems integration capabilities and wider product scope. For example, Sanluis Rassini, a Mexican producer of foundation brakes and leaf springs, expects to acquire or partner with another manufacturer to reach its goal of producing integrated suspension systems.³³

Table 3-3
Motor vehicle parts: Selected investments in Mexico

Manufacturer	Investments in Mexico
American Axle & Manufacturing (U.S.)	To invest \$120 million in a Silao facility for production of axles for General Motors. Expected start-up in 2000.
Budd Company (U.S.)	Joint venture with Hirotec (Japan) and Sumitomo (Japan) in Silao to design and manufacture automotive sheet metal stampings and assemblies. Start-up in 1999.
Delphi Automotive Systems (U.S.)	\$12.4 million investment in Gabriel de Mexico, a Mexican automotive damper and suspension module manufacturer. To invest \$55 million in brake and suspension plant near Ramos Arizpe. Start-up in mid-1999.
LucasVarity (U.K.)	To invest \$8 million in brake plant in Queretaro to replace an existing facility. Start-up in fall 1999.
Meritor Automotive (U.S.)	To begin production of truck axles at a new plant in Queretaro in June 1999.
Sachs Automotive (Germany)	To invest \$70 million in an automatic transmission components plant in Ramos Arizpe. Start-up in mid-1999.
Williams Controls (U.S.)	Established plant to manufacture electronic throttle controls for truck and diesel engine manufacturers.

Sources: Various industry publications.

Regional Trade Patterns

Canada, Mexico, Japan, and Germany are the leading U.S. trading partners for motor vehicles and parts. Canada has consistently accounted for over 50 percent of U.S. motor vehicle exports, with the other three combined markets accounting for approximately 20 percent of the total (table 3-4). Mexico replaced Japan as the second-leading market for U.S. motor vehicle exports in 1997, as exports to Mexico registered an average annual increase of 84 percent, while exports to Japan steadily decreased during 1995-98. This surge in exports to Mexico is a reflection of U.S. automakers' efforts to rationalize production within North America in the wake of Mexican market reforms under NAFTA.

³² Joel Millman, "Mexico Becomes a Leader in Car Parts," *Wall Street Journal*, Mar. 30, 1999, p. A21.

³³ John Couretas, "Mexico Supplier's Aim: Move From Parts to Systems," *Automotive News*, Mar. 8, 1999, p. 24B.

Table 3-4
Motor vehicles:¹ U.S. exports of domestic merchandise, imports for consumption, and
merchandise trade balance, 1995-98

(Million dollars)

Country	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Canada	11,306	12,039	14,213	13,379
Mexico	362	1,159	1,938	2,259
Japan	2,981	2,562	1,559	1,118
Germany	641	1,163	1,092	1,163
Other	6,055	5,770	5,592	4,625
Total	21,345	22,693	24,394	22,544
U.S. imports for consumption:				
Canada	33,236	33,676	35,884	37,671
Mexico	8,386	11,714	12,270	13,225
Japan	28,994	26,862	27,906	28,864
Germany	7,661	8,346	9,761	12,484
Other	5,940	6,518	7,167	7,584
Total	84,217	87,116	92,988	99,828
U.S. merchandise trade balance:				
Canada	-21,931	-21,637	-21,671	-24,293
Mexico	-8,023	-10,554	-10,332	-10,965
Japan	-26,013	-24,300	-26,347	-27,746
Germany	-7,020	-7,183	-8,669	-11,322
Other	115	-749	-1,585	-2,958
Total	-62,872	-64,423	-68,594	-77,284

¹ Data are for all motor vehicles, which include passenger cars, light trucks, medium- and heavy-duty trucks, buses, and bodies and chassis of the foregoing.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

U.S. imports of motor vehicles are even more heavily concentrated with respect to the four leading partners. Canada has consistently accounted for 39 percent of U.S. motor vehicle imports during 1995-98, with Japan, Mexico, and Germany accounting for 54 percent during the period. U.S. motor vehicle imports from Mexico have increased steadily during 1995-98, with an average annual increase of 16 percent.

On average, nearly 50 percent of the U.S. global trade deficit in motor vehicles in any year is generated by trade with Canada and Mexico, where U.S., Japanese, and European automakers produce passenger vehicles for the U.S. market.³⁴ Approximately 90 percent of motor vehicle exports from Mexico are destined for the United States and Canada;³⁵ similarly, the United States and Mexico accounted for 97 percent of Canadian exports in 1996.³⁶ In that year, Canada exported

³⁴ The U.S. trade deficit in motor vehicles in 1998 (\$77.3 billion) accounted for 28 percent of the total U.S. merchandise trade deficit that year (\$272.9 billion). See U.S. International Trade Commission, *Shifts in U.S. Merchandise Trade in 1998*, USITC publication 3220, Aug. 1999.

³⁵ EIU, 2d quarter 1998, p. 51.

³⁶ Industry Canada, *The Automotive Competitiveness Review: A Report on the Canadian Automotive Industry 1998*, p. 5, found at <http://strategic.ic.gc.ca/autoe>.

approximately 87 percent of its passenger vehicle production, mostly to the United States and Mexico.³⁷

The dominance of Canada and Mexico in U.S. automotive trade extends into the parts sector, reflecting the influence of APTA and NAFTA in shaping North American industry integration and the direction of auto parts trade. The U.S. automotive industry is believed to incorporate a significant level of U.S. parts in its Canadian and Mexican operations, generating large trade flows in such sectors as engines and related parts. GM, Ford, and DC have a long history as producers of engines and parts at numerous plants in Canada and Mexico. Engines and parts from these facilities as well as those in the United States are shipped throughout North America to meet automakers' specific engine needs. These producers are also increasingly sourcing large engine components from Mexico's numerous established castings producers. Because of these extensive linkages, Canada and Mexico annually accounted for 72 percent or more of U.S. exports of certain automotive parts³⁸ during 1995-98 (table 3-5). Engines and related parts represented 30 percent of U.S. automotive parts exports to Canada and 17 percent of such exports to Mexico in 1998. Exports to Japan and Germany consistently accounted for another 6 to 7 percent of annual U.S. auto parts exports.

The same four countries emerged as the leading U.S. import sources of automotive components during the period. NAFTA-partners Canada and Mexico supplied a growing share of U.S. auto parts imports, rising from 54 percent in 1995 to 60 percent in 1998. Canada was the leading supplier of engines and related parts in 1998, accounting for 28 percent (\$3.3 billion) of automotive parts imports from Canada and 29 percent of total U.S. imports of these products. Mexico supplied another 22 percent (\$2.3 billion) of such parts imports in that year. Mexico was the principal foreign supplier of wiring harnesses in 1998, accounting for 35 percent (\$3.7 billion) of parts imports from Mexico and 84 percent of total U.S. imports of these products. Japan and Germany accounted for 19 percent and 6 percent, respectively, of U.S. automotive parts imports in 1998, reflecting the established ties between Japanese and German transplant automakers and their home-country suppliers, as well as a desire by these automakers to retain certain core technologies, such as engine manufacturing, at their home manufacturing bases.

Implications for the Competitiveness of the North American Motor Vehicle Industry

The trend toward full integration of the North American automotive industry promises real competitive benefits for the manufacturers involved. Cross-border integration allows manufacturers to focus on core competencies and rationalize production, promoting greater efficiency through specialization, while providing economies of scale and lower production costs. During the last 5 years, the U.S. automotive industry has experienced growth in total trade, stable but robust production and capacity utilization levels, and continued investment in the United States as well as other North American locations. Both NAFTA and the strong U.S. economy have contributed to these developments.

³⁷ Ibid, p. 15.

³⁸ The products covered in this group include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, seats and parts, and miscellaneous parts and accessories.

Table 3-5
Certain motor-vehicle parts:¹ U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, 1995-98

(Million dollars)

Country	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Canada	18,568	18,952	21,057	22,195
Mexico	5,911	5,824	7,833	7,586
Japan	1,151	1,545	1,848	1,765
Germany	816	788	835	832
Other	<u>7,123</u>	<u>7,419</u>	<u>8,273</u>	<u>7,681</u>
Total	33,568	34,528	39,847	40,061
U.S. imports for consumption:				
Canada	9,008	10,202	11,018	11,802
Mexico	7,247	8,144	9,617	10,563
Japan	7,380	6,963	6,511	6,900
Germany	1,523	1,618	1,531	1,750
Other	<u>4,802</u>	<u>5,137</u>	<u>5,560</u>	<u>6,070</u>
Total	29,959	32,063	34,237	37,085
U.S. merchandise trade balance:				
Canada	9,560	8,750	10,039	10,393
Mexico	-1,336	-2,320	-1,784	-2,977
Japan	-6,229	-5,418	-4,663	-5,135
Germany	-707	-830	-696	-918
Other	<u>2,321</u>	<u>2,282</u>	<u>2,713</u>	<u>1,611</u>
Total	3,609	2,465	5,610	2,976

¹ The products covered in this group include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, seats and parts, and miscellaneous parts and accessories.

Note.—Calculations based on unrounded data; figures may not add to totals shown.

Source: Compiled from official statistics of the U.S. Department of Commerce.

As the number of preferential trade agreements negotiated by the Government of Mexico with non-NAFTA trading partners increases, the attractiveness of Mexico as a manufacturing location will also increase.³⁹ Currently, automakers have duty-free access to more countries from their assembly facilities in Mexico than they do from their plants in the United States.⁴⁰

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³⁹ In addition to NAFTA, Mexico has free-trade agreements with Costa Rica, Nicaragua, Colombia, Venezuela, Bolivia, and Chile.

⁴⁰ U.S. Department of Commerce, International Trade Administration, *Fourth Annual Report to Congress, Impact of the North American Free Trade Agreement on U.S. Automotive Exports to Mexico (and on Imports from Mexico)*, July 1998, p. 7, found at <http://www.ita.doc.gov/industry/basic/naftaauto98.html>.

Television Receivers and Parts

Despite the movement of all assembly of smaller screen (19 inches and under) television receivers from the United States to Mexico, there is still significant and growing U.S. production of television parts (such as color picture tubes) and larger screen television receivers. The North American television receiver and parts industry⁴¹ began as a U.S. industry, with factories in the United States fabricating all components and then assembling these components into complete television receivers. Integration of the North American industry began in the 1960s and 1970s as U.S. manufacturers sought to improve their cost competitiveness vis-a-vis imports from Asia by opening factories in Mexico to take advantage of lower labor costs. Increasing competition led to the movement of most assembly of North American television receivers from the United States to Mexico. However, while U.S. color television receiver (CTV) production began to decline, U.S. color picture tube (CPT) production and exports increased, reflecting related-party shipments of CPTs to television receiver assembly plants in Mexico. Although the United States has faced a trade deficit in this industry for a number of years, the deficit has declined in recent years as U.S. sector exports (largely CPTs) increased by 75 percent during 1995-98, while imports increased by only 7 percent.

Emergence of Mexico's CTV Industry

During the 1960s, U.S. CTV producers began to face increasing competition from Asia, most notably from Japan, leading U.S. producers to begin shifting the assembly of television receivers to Mexico in 1968 to achieve greater price competitiveness. Sony, a Japanese CTV producer, opened the first foreign-owned factory in the United States in 1972, and was followed by other Asian and European companies, some building new factories and others acquiring U.S. producers (table 3-6). In 1995, the U.S. television receiver and parts industry consisted of 14 CTV manufacturers and 7 CPT manufacturers (all but Zenith were foreign owned), as well as a number of component manufacturers. By 1999, only 7 CTV manufacturers and 6 CPT manufacturers remained in the United States. With the purchase of Zenith by LG Electronics of Korea, the only U.S.-owned CTV producer was Five Rivers Electronics Innovations, a company that bought and operated a CTV plant formerly owned by Philips. An unknown number of component manufacturers remain as well.

Table 3-6
Selected U.S. CTV manufacturer acquisitions, 1974-95

Year	Acquiring company	Headquarters	Acquired company/brand
1974	Philips	Netherlands	Magnavox (consumer electronics business) ¹
1974	Matsushita	Japan	Quasar ¹
1976	Sanyo	Japan	Warwick
1981	Philips	Netherlands	Philco and Sylvania ¹
1988	Thomson	France	GE/RCA (consumer electronics business) ¹
1995	LG Electronics	Korea	Zenith ^{1,2}

¹ This company's CPT factories in North America were also acquired.

² LG acquired a majority interest in Zenith in 1995, and the outstanding interest in 1998.

Source: "Past Manufacturer Takeovers," *Television Digest*, July 24, 1995, p. 16.

⁴¹ The television receiver and parts industry includes color television receivers, color picture tubes, and parts of both. U.S. factories stopped producing black and white televisions in the 1970s.

During this period, U.S. producers opened factories in Mexico to handle labor-intensive operations. RCA built a picture tube plant in Mexico City in the 1960s to supply television receiver producers in South America, and later to supply RCA's subsequent CTV plants in Mexico.⁴² More factories were built in Mexico by RCA and others to produce components for television receivers and picture tubes assembled in the United States, then to assemble smaller screen size CTVs for export to the rest of North America, primarily the United States, using U.S.-made tubes. By the 1970s, Japan-based producers had established plants in Baja California for the assembly of CTVs for the U.S. market, using both U.S.-made parts and components imported from Asia.

By the late 1980s, North American assembly of television receivers with high labor content (generally, those with screen sizes under 19 inches) had moved to Mexico primarily to take advantage of the Maquiladora Program and more competitive wages, while design and R&D facilities remained in the United States. Labor costs per CTV unit are fairly uniform across screen sizes, but represent a greater share of the total cost of producing small screen sets compared with large screen sets. The greater cost of transporting large-screen CTVs and the higher margins associated with large-screen CTVs enabled U.S. manufacturers to remain competitive in the large-screen market. However, as more U.S. CTV factories closed, Mexican factories began making some of the large-screen CTVs.

Mexico produced CTVs valued at \$3.2 billion in 1995 and \$3.5 billion in 1998, of which 90 percent were exported to the United States. In the same years, the United States produced CTVs valued at \$5.1 billion and \$4.9 billion, respectively.⁴³ Although U.S. production value was greater, Mexico produced a greater volume in 1998 -- almost 18 million units in Mexico versus about 11.5 million in the United States. Television receivers with a diagonal screen-size of 19 inches and smaller account for the majority of televisions produced in Mexico, whereas all U.S. production is of more expensive televisions with larger screen sizes (usually with diagonal screen sizes of 27 inches or greater). Although Canada produced \$277 million of CTVs and a small volume of CPTs in 1995, the sole CPT and CTV manufacturers in Canada had shut down by 1998.

Manufacturing Integration and Investment

The 22 CTV assembly plants and 11 CPT factories operating in North America in early 1999 are listed in table 3-7. U.S. television receiver manufacturers established assembly operations in Mexico as early as 1967, under the auspices of the Border Industrialization Program. Initially, factories in Mexico supplied U.S. CPT and CTV plants with subassemblies made from U.S. and other imported components. By the time NAFTA was signed, every U.S. manufacturer of CTVs had located at least one assembly plant in Mexico; some firms had other significant operations as well, most notably the "stuffing" of printed circuit boards for CTVs and the production of electron guns for CPTs.⁴⁴ With the signing of NAFTA, the migration of CTV

⁴² RCA was the first U.S. CTV company to establish a maquiladora operation in Ciudad Juarez under Mexico's Border Industrialization Program in 1968. RCA was acquired by Thomson in 1988 (table 3-6).

⁴³ *Yearbook of World Electronics Data 1998/9*, Reed Electronics Research, 1998.

⁴⁴ Printed circuit boards are components of CTVs on which electronic components such as resistors, capacitors, and integrated circuits have been placed and connected. At one time, companies used women (with small hands) in countries with low labor costs to "stuff" (place components on) the boards. Stuffing has now been automated for boards produced in large volumes. Electron guns are components of CPTs

(continued...)

Table 3-7
North American manufacturers of color picture tubes and color television receivers, 1999

Country of ownership	Company name	Plant location
<i>Color picture tubes</i>		
Japan	Hitachi	Greenville, SC
	Matsushita	Troy, OH
	Sony	San Diego, CA; Pittsburgh, PA
	Toshiba	Horseheads, NY
Korea	Daewoo	Sonora, Mexico
	Samsung	Tijuana, Mexico
France	Thomson	Marion, IN; Lancaster, PA; Mexico City, Mexico
Netherlands	Philips	Ann Arbor, MI
<i>Color television receivers</i>		
Japan	AKEI	Vancouver, WA
	Hitachi	Tijuana, Mexico
	JVC	Tijuana, Mexico
	Matsushita	Tijuana, Mexico
	Orion	Princeton, IN
	Sanyo	Forest City, AR; Tijuana, Mexico
	Sharp	Memphis, TN; Rosarito, Mexico
	Sony	San Diego, CA; Pittsburgh, PA; Tijuana, Mexico; Mexicali, Mexico
	Toshiba	Lebanon, TN
Korea	Daewoo	Mexicali, Mexico
	LG/Zenith	Mexicali, Juarez, and Reynosa, Mexico
	Samsung	Tijuana, Mexico
France	Thomson	Juarez, Mexico
Netherlands	Philips	Juarez, Mexico
United States	Five Rivers	Greenville, TN

Source: Thomson Consumer Electronics and interviews with company officials.

assembly from the United States to Mexico accelerated. Certain provisions of the NAFTA agreement encouraged further integration of production in North America. For example, NAFTA rules of origin require that CTVs claiming a tariff preference contain North American-made CPTs to be considered of North American origin, thus fostering demand for U.S. CPTs and providing economic incentive to retain existing U.S.-based picture tube plants. The rules of origin also encouraged Japanese and Korean companies with television assembly plants in Mexico to purchase CPTs from existing North American (U.S.) suppliers or to invest in new CPT production facilities in the United States or Mexico.

The North American television receiver and parts industry is now well integrated between Mexico and the United States, with low labor costs in Mexico continuing to attract operations requiring higher labor content, primarily CTV assembly. The United States supplies CPTs to the industry in Mexico from existing U.S. plants that would require investments in the tens to hundreds of millions of dollars to replace. The limited size of the Canadian market coupled with relatively high wages suggests that future CTV investment in Canada is unlikely.

⁴⁴ (...continued)
for which the labor content is also a significant cost factor.

The industry continues to attract new investment from outside North America, most notably from Korea, but the majority of this investment is going to Mexico. Within the past 4 years, Korean firms Daewoo and Samsung have built CTV and CPT factories in Mexico to produce for the North American market. Daewoo, which had not previously had a factory in North America, invested \$31.9 million in factories in Sonora and Mexico City.⁴⁵ In 1996, Samsung built a \$200-million factory complex in Tijuana and closed the CTV factory it had operated in the United States since the mid-1980s.⁴⁶ LG Electronics, another Korean company, acquired a controlling interest in Zenith in 1996, only to close Zenith's U.S. CTV factory in 1997, with remaining assembly operations moved to Mexico. The Asian financial crisis may have slowed further plans for Asian expansion into North America. By early 1999, Daewoo had announced that it would sell off \$7.5 billion in assets worldwide, including its CPT and PC monitor plant in Mexicali, in an effort to revamp its debt-laden operations,⁴⁷ and LG Electronics was considering the sale of Zenith.

Japanese companies also have recently invested in North America, and followed the pattern of CTV assembly in Mexico and tube production, sales, distribution, and administration in the United States. In 1995, Matsushita announced plans to invest \$127 million in expanding CPT production in its Troy, Ohio, plant, in addition to the \$1.4 billion it had already invested in 16 production sites in the United States beginning in the 1970s.⁴⁸ In 1995, JVC began building a \$36 million plant in Tijuana that initially made chassis for its CTV assembly plant in Elmwood, New Jersey, as well as assembled complete CTVs.⁴⁹ However, by 1996, JVC had closed its Elmwood plant and moved all CTV assembly to Mexico.⁵⁰ JVC distribution and marketing operations continue to be performed in the United States.

European producers with CTV plants in the United States also have moved some operations to Mexico. Due to competitive pressures, and coinciding with the expiration of a labor contract, Thomson closed its U.S. CTV factory in the spring of 1998 and moved all remaining CTV assembly operations to its three RCA plants in Ciudad Juarez, Mexico. Thomson continues to operate a CPT plant in Indiana and maintain its design, marketing, administrative, and distribution operations in the United States. Philips, another European-owned company with CTV assembly operations in Ciudad Juarez, divested itself of its CTV assembly plant in Greenville, Tennessee. The factory is now being managed by former Philips employees, and production is being sold to Philips and other CTV distributors. Like Thomson, Philips' design and administrative operations remain in the United States.

⁴⁵ Marlene Piturro, "The Asian Tigers are setting up shop in Mexico as a low-wage backdoor to the U.S. and Canada," *Mexico Business* July/August 1995, found at Internet address <http://www.nafta.net/mexbiz/articles/asian.htm>, retrieved Jul. 30, 1999.

⁴⁶ Samsung Electronics, "Samsung in the World," found at Internet address <http://www.samsung.com/corporate/tijuana.html>, retrieved July 30, 1999.

⁴⁷ "Daewoo to Sell Mexican Tube Plant," *Television Digest*, Apr. 26, 1999, p. 14.

⁴⁸ "Matsushita to Expand TV Production," *Television Digest*, May 22, 1995, p. 13. Not all 16 production sites were involved in television receiver and parts production.

⁴⁹ "JVC's Mexico TV Plant," *Television Digest*, May 29, 1995, p. 16.

⁵⁰ "JVC Moving TV Manufacture from U.S. to Mexico," *Television Digest*, Jan. 15, 1996, p. 7.

Regional Trading Patterns

Most regional trade in this industry is accounted for by CPTs and other CTV parts exported from the United States to Mexico for assembly into CTVs, generally of screen sizes under 27 inches, with the finished receivers being exported to the United States and Canada. The United States also imports large volumes of CTV parts from Mexico for assembly into larger CTVs for export to Mexico and Canada, as well as for domestic consumption. Trade with Mexico in color television receivers and parts accounted for 47 percent of U.S. sector exports in 1998 and 73 percent of U.S. imports (table 3-8).

U.S. industry exports grew at an average annual rate of 21 percent during 1995-98 to \$3.8 billion, with Mexico and Canada accounting for 57 percent of 1998 exports (table 3-8). Picture tubes and CTV parts accounted for 76 percent of U.S. exports in 1998, with the majority going to Mexico. Canada was a significant market only for U.S.-made large-screen televisions, accounting for about one-third of U.S. exports in 1998. Exports of television receivers and parts to Mexico during this period almost doubled to \$1.8 billion. CPTs sent to CTV assembly plants in Mexico rose to \$1.4 billion in 1998 and accounted for 90 percent of the increase in sector exports to Mexico during 1995-98.

U.S. imports of television receivers and parts rose from \$5.4 billion to \$5.8 billion during 1995-98, a 2.3-percent average annual rate of increase (table 3-8). Imports of CTVs rose from \$3.7 billion to \$4.7 billion during 1995-98, accounting for 81 percent of sector imports in 1998, as U.S. CTV producers shifted more final assembly to Mexico and lost market share to Japanese or Korean producers with assembly plants in Mexico. Mexico accounted for 73 percent of U.S. imports of all sector products in 1998 and 77 percent of CTV imports. U.S. imports of CPT parts also increased, to supply CPT producers which in turn supplied CTV factories in Mexico. While imports of CTVs from Mexico increased during 1995-98, imports of CTV parts from Mexico decreased by \$320 million (46 percent), as parts formerly destined for U.S. factories were instead consumed in Mexican factories.

Canada produces no goods in this industry. Canada imported over \$616 million in CTVs in 1998, with \$292 million from Mexico and \$269 million from the United States. As U.S. CTV production continues to decline, it is likely that Mexico will provide a greater share of Canadian consumption.

Implications for the Competitiveness of the North American Television Receiver and Parts Industry

The North American industry appears to have a good future ahead of it with two caveats. U.S. CPT production is likely to remain strong and continue growing as long as cathode-ray tubes (CRT) remain the dominant display technology. New flat-panel display (FPD) technologies such as plasma displays are thought to be the display technology of the future. Large screen plasma display television receivers produced in Japan are now on the market, although at prices that are not competitive with CRT-based displays. If and when plasma or other flat-screen displays become cost-competitive, it is likely that demand for CPTs will decline. There is minimal U.S. production of flat-screen displays, and it is unlikely that foreign producers will invest in factories in the United States. Entry into the FPD market can be difficult because of the financial resources and the technological expertise required. In addition, because of the existence

Table 3-8
Color television receivers and parts: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, 1995-98
(Million dollars)

Country	1995	1996	1997	1998
U.S. exports of domestic merchandise:				
Mexico	902	1,218	1,476	1,780
Japan	60	59	91	439
Malaysia	47	58	54	28
Thailand	5	7	21	11
Canada	419	348	357	387
Other	750	843	1,026	1,171
Total	2,183	2,533	3,025	3,816
U.S. imports for consumption:				
Mexico	3,278	3,456	3,562	4,265
Japan	668	388	294	276
Malaysia	522	491	466	485
Thailand	259	219	364	434
Canada	112	105	13	11
Other	598	503	353	352
Total	5,437	5,162	5,052	5,823
U.S. merchandise trade balance:				
Mexico	-2,376	-2,238	-2,086	-2,485
Japan	-608	-329	-203	163
Malaysia	-475	-433	-412	-457
Thailand	-254	-212	-343	-423
Canada	307	243	344	376
Other	152	340	673	819
Total	-3,254	-2,629	-2,027	-2,007

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

of very extensive product qualification procedures, a new entrant is likely to experience a considerable time lag before it can begin commercial production.

The Mexican CTV industry likely would decline as well if display technology moves towards FPDs, although at a slower rate. CRT technology will likely remain the display technology of choice for smaller screen television receivers where price is the dominant factor. Smaller screen televisions accounted for 40 percent of the U.S. market in 1998 in terms of number of televisions sold to dealers. That share is expected to decline as consumers continue to move up to larger screen sizes. That trend will benefit U.S. production of television receivers (all of which is of larger screen sizes) vis-a-vis production in Mexico until FPD televisions (imported from Japan) become a dominant market force.

The end of duty drawbacks (refund of customs duties paid) also might have a favorable impact on the North American industry. Effective January 1, 2001, companies (particularly Korean and Japanese firms) that assemble television receivers and parts in Mexico and export those products under NAFTA to the United States or Canada will have to pay import duties (and cannot claim refunds) on any components or materials that did not originate in North America. Companies using non-North American inputs (the bulk of inputs are of North American origin) may react in different ways depending on the value of the non-North American content. Some firms

may maintain the status quo and pay the additional tariff on parts from outside North America. Others may switch to alternative sources within North America. Further, some companies may relocate Mexican factories to the United States (because U.S. tariff rates on non-NAFTA television components will be lower in 2001 than Mexican tariff rates) or to other nearby countries that are eligible for duty-free treatment under the Generalized System of Preferences, or the Caribbean Basin Economic Recovery Act.⁵¹ The Government of Mexico is also said to be giving serious consideration to possible “competitiveness cuts” in external tariffs in order to keep factories in Mexico that consume imported materials.⁵²

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Apparel

The growth in U.S. imports of apparel under the production-sharing provisions of HTS chapter 98⁵³ slowed significantly during 1998, increasing by 13 percent (\$1.4 billion) over the 1997 level to \$12.9 billion, compared with a 30-percent increase in 1997 (table 3-9). Nonetheless, imports under the production-sharing provisions continued to grow faster than total U.S. apparel imports, which rose by 11 percent to \$53.6 billion in 1998. As a result, the share of total 1998 apparel imports accounted for by imports under the production-sharing provisions reached a high of 24 percent. Industry sources suggest that the 1998 slowdown in the growth of imports under the production-sharing provisions, which come almost entirely from Mexico and beneficiary countries under the Caribbean Basin Economic Recovery Act (CBERA),⁵⁴ was attributable to increased competition from countries in Asia whose currencies fell in value relative to the U.S. dollar during the Asian economic crisis.⁵⁵ The currency devaluations effectively reduced U.S. dollar prices of their goods in the U.S. market. Excluding China, which is the largest source of U.S. apparel imports and which did not devalue its currency during the crisis (and whose shipments to the

⁵¹ Journal of Commerce Online, “Y2K + 1 adds up to headache: ‘01 NAFTA customs shift could imperil maquiladoras,” found at Internet address <http://www.joc.com/issues/current/page1/e22449.htm>, retrieved May 7, 1999.

⁵² Ibid.

⁵³ Unlike most other products, statistics on imports of apparel under HTS 9802.00.80 and 9802.00.90 provide an accurate gauge of production sharing in the apparel sector. Since apparel from Mexico and the Caribbean Basin were dutiable in 1998, there was an incentive to use the production-sharing tariff provisions when importing apparel.

⁵⁴ The 1984 CBERA grants duty-free entry to most categories of goods from 24 beneficiary countries. While most textiles and apparel are statutorily excluded from duty-free entry under CBERA, garments assembled in selected CBERA countries from U.S. fabrics are eligible for preferential market access, as discussed in the section “Competition Between Principal Sources.”

⁵⁵ American Textile Manufacturers Institute, “International Trade,” *Textile HiLights*, Dec. 1998, Washington, DC, pp. 1-v, and “Low Cost Imports Still Staggering Industry,” *Southern Textile News*, June 7, 1999, p. 12.

Table 3-9

Apparel:¹ U.S. imports for consumption, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by principal suppliers (based on the value of U.S. components contained in HTS PSP imports in 1998), 1995-1998

(Million dollars)

Country	1995	1996	1997	1998
	Total imports			
Mexico	2,658	3,663	5,140	6,586
Dominican Republic	1,744	1,762	2,223	2,349
Honduras	919	1,220	1,661	1,875
El Salvador	583	721	1,052	1,170
Costa Rica	756	706	844	827
Jamaica	531	505	471	422
Guatemala	691	809	976	1,150
Haiti	76	103	143	225
Colombia	370	316	350	364
Nicaragua	74	142	182	232
All other	31,005	31,494	35,169	38,374
Total	39,408	41,443	48,212	53,574
CBERA countries	5,461	6,042	7,616	8,307
	Production-sharing imports under HTS Chapter 98			
Mexico	2,331	3,033	4,204	5,187
Dominican Republic	1,565	1,601	2,060	2,154
Honduras	675	970	1,362	1,586
El Salvador	477	588	894	1,006
Costa Rica	670	646	793	791
Jamaica	448	437	425	382
Guatemala	520	579	651	706
Haiti	74	96	134	211
Colombia	271	212	257	253
Nicaragua	18	33	44	67
All other	710	649	665	599
Total	7,758	8,845	11,491	12,939
CBERA countries	4,507	5,009	6,421	6,949
	U.S. content of imports under HTS Chapter 98			
Mexico	1,637	2,120	2,849	3,368
Dominican Republic	989	1,009	1,294	1,358
Honduras	479	688	972	1,130
El Salvador	260	332	533	580
Costa Rica	443	444	529	524
Jamaica	363	350	347	309
Guatemala	258	275	298	305
Haiti	51	67	98	155
Colombia	169	123	153	148
Nicaragua	8	14	27	47
All other	108	103	112	99
Total	4,765	5,526	7,211	8,024
CBERA countries	2,888	3,215	4,132	4,438

¹ Includes apparel of textile materials, such as cotton, wool, manmade fiber, or silk fabrics, and nontextile materials, such as fur, leather, and plastics. Excluded are nonwoven (disposable) garments.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

United States fell by 4 percent to \$7.2 billion in 1998), apparel imports from Asia rose by 12 percent (\$2.5 billion) to \$23.1 billion in 1998, following an increase of 10 percent in 1997.⁵⁶

In 1998, U.S. apparel imports from Mexico under the production-sharing provisions grew by 23 percent (\$983 million) over the 1997 level to \$5.2 billion, and those from CBERA countries rose by 8 percent (\$528 million) to \$6.9 billion. However, the 1998 increases for both Mexico and CBERA countries were much smaller than their respective 1997 gains of 39 percent and 28 percent, and they represented the smallest annual growth rates for these countries' shipments during the period that NAFTA has been in effect. Production-sharing trade also accounted for most of the apparel imports from these countries in 1998—84 percent of the total for CBERA countries and 79 percent for Mexico.

U.S. apparel producers have expanded their use of assembly operations in CBERA countries and Mexico to reduce costs. These countries offer competitively priced labor to perform the labor-intensive sewing tasks, and their proximity to suppliers and markets in the United States enables U.S. firms to maintain greater management control over production. By moving assembly operations to CBERA countries and Mexico, U.S. firms save on labor costs and obtain quicker turnaround than importing from Asia. Moreover, CBERA countries and Mexico benefit from preferential access to the U.S. market for apparel assembled from U.S. components.

The apparel sector is the major beneficiary of duty savings for all goods imported under the production-sharing provisions of HTS chapter 98, reflecting the high U.S. duty rates for apparel and the significant share of the total value of the imported apparel accounted for by duty-free U.S.-origin components.⁵⁷ The sector accounted for 77 percent (\$1.6 billion) of the total duty savings in 1998 (table B-17), compared with 59 percent in 1997. The share of the total value of production-sharing imports accounted for by duty-free, U.S.-cut components was 62 percent (\$8.0 billion) in 1998, compared with 28 percent for all other products.

Competition Between Principal Sources

Competition between CBERA countries and Mexico for assembly work from U.S. apparel firms changed with the implementation of NAFTA in 1994. Under NAFTA, U.S. apparel imports from Mexico that are assembled from "fabric wholly formed and cut in the United States" (often referred to as 807A imports) are eligible to enter free of duty and quota under HTS heading 9802.00.90.⁵⁸ In 1998, such garments totaled \$4.2 billion and accounted for 63 percent of U.S. apparel imports from Mexico. These imports compete directly with most apparel imports from CBERA countries entered under HTS heading 9802.00.80. Although garments from CBERA countries assembled from U.S.-formed and cut fabrics are eligible to enter under preferential quotas known as guaranteed access levels (GALs),⁵⁹ they are still subject to duty on the value

⁵⁶ U.S. apparel imports from Asia (excluding China) had fallen by 2 percent in 1996, the year before the onset of the Asian economic crisis and major currency devaluations.

⁵⁷ Based on official statistics of the U.S. Department of Commerce, the trade-weighted average duty on apparel in 1998 was 15.8 percent ad valorem, compared with about 3 percent for other products.

⁵⁸ NAFTA also accords preferential tariff treatment to certain goods from Mexico that do not satisfy NAFTA's rules of origin. Such goods may be granted preferential tariff treatment up to specified annual quantitative "tariff preference levels" (TPLs).

⁵⁹ The United States currently has GALs and regular quotas with six CBERA countries--Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, and Jamaica.

added offshore.⁶⁰ In addition, Mexico benefitted from the substantial devaluation of the peso in December 1994 relative to the dollar, which effectively reduced dollar prices of its goods in the U.S. market. Industry sources in some CBERA countries have expressed concern that while their currencies have remained fairly stable, devaluations in the Mexican peso during the past couple of years have exacerbated their price disadvantages with Mexican apparel exports.⁶¹

NAFTA trade preferences and peso devaluations have helped Mexico expand its apparel shipments to the United States faster than the CBERA countries during 1995-98. U.S. apparel imports from Mexico under the production-sharing provisions rose by an average annual rate of 31 percent during 1995-98, compared with an average annual growth rate of 16 percent for such imports from CBERA countries. Some U.S. industry sources have claimed that NAFTA trade preferences granted to U.S. imports of apparel from Mexico have caused trade and investment to be diverted from CBERA countries to Mexico.⁶² To address this situation, legislation introduced in the U.S. Congress in 1999 would provide, in addition to other economic assistance, NAFTA-equivalent treatment for certain sector goods and other articles exempted from duty-free entry under the CBERA. On November 3, 1999, the Senate approved by a vote of 76 to 19 a package of trade bills (H.R. 434, as amended, the Trade and Development Act of 1999) that incorporated the text of the United States-Caribbean Basin Trade Enhancement Act (S. 1389), which would provide additional trade benefits to beneficiary countries of the Caribbean Basin, including elimination of duties and quotas on certain apparel articles assembled from U.S. fabrics and yarns. The next step in the legislative process is the conference between Senate and House conferees to reach a final agreement on differing Senate and House versions of H.R. 434.

Recent Developments in Major Country Sources of Apparel

Mexico

Apparel manufacturing operations in Mexico continue to expand rapidly. As of March 1999, 934 textile and apparel maquiladoras (almost one-third of all Mexican maquiladoras) employed 232,745 workers,⁶³ up from 797 plants and 189,000 workers in the preceding year. Although wage rates for apparel workers in Mexico vary widely by region according to local labor supply and demand,⁶⁴ the national average hourly wage rate for such workers in 1998 was \$1.51 compared with an average hourly wage of \$8.52 for U.S. apparel workers.⁶⁵

⁶⁰ For every \$10 in f.o.b. value, a typical CBERA garment entered under the production-sharing tariff provisions contains \$6.40 in duty-free U.S. parts and \$3.60 in dutiable, foreign value-added. Applying the 1998 trade-weighted average duty on apparel of 15.8 percent to the foreign value added yields an average duty of \$0.57, or an effective average ad valorem equivalent of 5.7 percent.

⁶¹ Mercedes Cortazar, "Honduras Continues to Lead Central America," *Apparel Industry Internacional*, found at Internet address <http://www.aiimag.com/aiieng/archives/1198/nstor2.html>, retrieved Mar. 24, 1999.

⁶² Textile trade consultant, telephone conversation with USITC staff, Jan. 22, 1999. See also Paula L. Green, "Mexico Leading the U.S. Import Parade," *Journal of Commerce*, Sept. 9, 1999, found at Internet address <http://www.joc.com/issues/current/trade/e43461.htm>, retrieved Sept. 9, 1999.

⁶³ "Maquila Scoreboard," *Twin Plant News*, vol. 15, No. 2, Sept. 1999, p. 63.

⁶⁴ Manager of a Mexican sewing contracting firm, telephone interview with USITC staff, June 12, 1998.

⁶⁵ Bureau of Labor Statistics, "National Employment, Hours, and Earnings: Apparel and other Textile (continued...)

The share of total apparel imports from Mexico entered under the production-sharing tariff provisions declined by 9 percentage points during 1995-98, to 79 percent. The decline in the relative importance of these imports from Mexico is expected to continue because most apparel imports from Mexico became duty-free under NAFTA on January 1, 1999, which reduced the incentive to declare eligibility for entry into the United States under the provisions. The decline may also reflect a relatively new and believed to be growing shift in trade from sewing-only assembly operations to vertically integrated manufacturing, in which more value-added operations such as fabric manufacturing and cutting are taking place in Mexico.

Movement Toward Vertically Integrated Manufacturing

Although U.S. apparel producers have increasingly shifted sewing operations offshore, capital-intensive fabric manufacturing has remained in the United States. In recent years, however, several leading U.S. apparel fabric manufacturers have established or have announced plans to invest in fabric manufacturing operations in Mexico. Some of these facilities will be fully vertically integrated, producing thread and yarn from raw materials, weaving fabric, processing the fabric, cutting, and sewing the apparel, while other facilities are being developed in coordination with partner companies that will specialize in fabric processing, cutting, and/or apparel production, forming an integrated manufacturing network. The primary aim of establishing these facilities is to enhance their competitiveness by servicing their apparel customers' offshore operations and avoiding losing business to Asian competitors.⁶⁶ Full vertical integration guarantees textile manufacturers of a market for their fabric. The developments in both the U.S. and Mexican markets that are stimulating the trend toward vertically integrated manufacturing in Mexico as well as integrated manufacturing networks include--(1) continued pricing pressures;⁶⁷ (2) the emergence of stronger vendor-supplier relationships in the U.S. textile and apparel market, motivating textile vendors to service clients who are increasingly moving to offshore locations; (3) simplified logistics and quick product delivery, increasingly important as the time line of the apparel supply chain has declined from 34-40 weeks to 15-20 weeks;⁶⁸ (4) Mexican Federal and local government support and financial assistance for enhancing the infrastructure needed for competitive textile and apparel manufacturing (e.g., transportation, utilities, communications, and skilled labor);⁶⁹ (5) retailers'

⁶⁵ (...continued)

Products," found at Internet address <http://146.142.4.24/cgi-bin/dsrv>, retrieved Sept. 29, 1999.

⁶⁶ Some industry sources claim that the Asian economic crisis, accompanied by currency devaluations and lower-cost Asian imports, expedited the movement of textile and apparel manufacturing to Mexico in 1997 and 1998 (see Kurt Salmon Associates Capital Advisors, "Moving to Mexico -The Battle Against Low Cost Asian Imports," *Textile Transactions & Trends*, Summer 1999, pp. 1-2). Representatives of several leading U.S. fabric manufacturers also have asserted that by establishing integrated manufacturing in Mexico, they are helping to recapture business previously lost to Asian competitors. (Government affairs representative of a leading U.S. apparel fabric producer, telephone interview with USITC staff, Aug. 24, 1999).

⁶⁷ Consumers and retailers have been conditioned to declining real prices for apparel and textile goods (see John S. Pickler, "Offshore Trends and Company-Specific Issues Masking Favorable Demand - Hold," *Textile and Apparel Trends - July Monthly*, Prudential Securities, July 30, 1999, p. 29, and S. Gray Maycumber, "Knitters Facing Changes in Rough Market," *DNR*, Mar. 9, 1999, p. 12).

⁶⁸ Kurt Salmon Associates Capital Advisors, "Moving to Mexico - The Battle Against Low Cost Asian Imports," *Textile Transactions & Trends*, Summer 1999, p. 2.

⁶⁹ Industry sources claim that the backing of the Mexican Federal and local governments was instrumental in helping to develop the resources needed to establish and launch NuStart, a "textile city" near Cuernavaca in the State of Morelos. (Government affairs representative of a major textile

(continued...)

growing demand for full package apparel services as one-stop shopping becomes more important;⁷⁰ (6) a shift away from manufacturing by major apparel companies to focus on marketing and brand creation, encouraging textile producers to begin making apparel to ensure a market for their products;⁷¹ and (7) U.S. textile manufacturers' recognition of the long-term potential of selling textiles and apparel to the Mexican market and to its Latin American neighbors with which Mexico has preferential trade agreements.⁷²

The principal forms of vertically integrated textile operations established or being planned in Mexico are highlighted in table 3-10. The prevalence of joint ventures in the emergence of vertically integrated textile operations reportedly is attributable in part to Mexican interest in acquiring U.S. management expertise.⁷³ Although Mexican textile manufacturing operations increasingly use state-of-the art technology and can produce quality goods, industry sources indicate they do not yet meet the high standards of customer service and delivery demanded by U.S. customers.⁷⁴ Joint ventures allow Mexican firms the opportunity to develop such expertise.

Another form of vertically integrated textile operations in Mexico is the multiparty partnership. NuStart, a nonprofit partnership launched in 1997 and located in Cuernavaca, Morelos, is serving as the prototype for other textile industrial complexes. Burlington Industries, Guilford Mills, Dupont-Akra Polyester, and Alpek S.A. de C.V. (Mexico) joined as founders of a nonprofit partnership to establish NuStart, which now houses seven U.S., Mexican, and Canadian-owned facilities--including Unger Fabric, a U.S. manufacturer of sports clothing;

⁶⁹ (...continued)

manufacturer, telephone interview with USITC staff, Aug. 24, 1999.)

⁷⁰ Full package apparel services typically refer to the type of sourcing arrangements that can provide the entire range of garment manufacturing from apparel design to all steps of textile production to distribution of the finished garment or any combination of these operations. In Mexico, full package services may refer to any package of services that goes beyond just the sewing of garments.

⁷¹ Industry sources claim that some apparel producers will no longer manufacture the garments they sell but will solely be marketing companies with a label and brand (Source Relations Manager of a major U.S. apparel producer, conversation with USITC staff, Feb. 17, 1999). This development has in turn prompted several U.S. fabric manufacturers to expand vertically into garment manufacturing in Mexico (Government affairs representative of a leading U.S. apparel fabric producer, Aug. 23, 1999). In January 1998, the Sara Lee Corp. announced its decision to divest most of its fabric manufacturing, finishing, and cutting operations (see Sara Lee Corp., "Sara Lee Corporation De-Verticalizes United States Yarn and Textile Manufacturing," news release posted Jan. 5, 1998, found at Internet address <http://www.saralee.com/corporate/corpnews/pr010598.htm>, retrieved June 17, 1998). The shift of apparel companies from production to marketing is reminiscent in the Central American context of United Fruit, which for the most part has ceased growing bananas and now purchases bananas from Central American growers and ships them to global markets. This strategy reduces the fixed costs of U.S. companies as well as their exposure to political risks.

⁷² Some U.S. textile manufacturers claim that although U.S. manufacturers have not yet significantly increased their sales to the Mexican market as a result of NAFTA, because of Mexico's much lower income levels, it is critical to set up Mexican operations in anticipation of this long-term potential. (Representative of a major U.S. textile manufacturer, interview with USITC staff, Aug. 23, 1999).

⁷³ Ibid.

⁷⁴ Ibid.

Table 3-10
U.S. textile and apparel firms with current or planned integrated manufacturing operations in Mexico as of September 1999

U.S. company (location)	Mexican partner or operation (location)	Business type/ Start up	Types of manufacturing operations
Burlington Industries, Inc. (Greensboro, NC)	Textiles Morelos (Cuernavaca, Morelos)	Mexican subsidiary; 1944	Originally produced apparel products and home furnishings for the Mexican market. Now exports to the United States.
	Mexican jeans-sewing facility (Aguascalientes, Aguascalientes)	Acquisition from Lucky Star Industries; 1998	Produce sewn garments from Burlington fabrics. Handle final wet processing and finishing of jeans.
	Hilos de Yecapixtla (Yecapixtla, Morelos)	Joint venture with Parkdale Mills; 1998	Produce cotton yarns for fabric woven at Yecapixtla ring-spun denim facility.
	Burlmex Denim (Yecapixtla, Morelos)	Unit of Burlington Global Denim division; 1999	Produce ring-spun denim fabrics for jeans and related sportswear.
	Casimires Burlmex (Yecapixtla, Morelos)	Unit of Burlington Tailor Fashions; 1999	Produce wool worsted and wool blend fabrics for men's and women's slacks/suits.
	NuStart Industrial Park (Cuernavaca, Morelos)	Nonprofit partnership with Guilford Mills, DuPont S.A. de C.V., and Alpek S.A. de C.V.; 1999	Deliver apparel fabrics and finished garments to customer's specifications.
	Denim-processing plant (Chihuahua)	50/50 joint venture with International Garment Processors; 1999	Offer full package of garment-making services: stonewashing, enzyme-washing, and sand blasting of denim jeans.
Cone Mills Corporation (Greensboro, NC)	Parras Cone de Mexico (Parras, Coahuila)	Joint venture with Compania Industrial de Parras; 1995	Produce high quality denim.
	Maquilas Y Confecciones Deborah/Starlite (Puebla)	Joint venture for textile park infrastructure development; 1999	Provide full package apparel services; Cone produces fabrics and apparel, Deborah/Starlite responsible for wet processing, distribution and marketing.
	Mexican textile and apparel industrial park (Altamira, Tamaulipas)	Joint venture with Guilford Mills; 2000	Produce ring-spun denim.

Table 3-10—Continued**U.S. textile and apparel firms with current or planned integrated manufacturing operations in Mexico as of September 1999**

U.S. company (location)	Mexican partner or operation (location)	Business type/ Start up	Types of manufacturing operations
Dan River, Inc. (Danville, VA)	Grupo Industrial Zaga (location not yet determined)	Joint venture; 2000	Opening, spinning, yarn dyeing, weaving, and finishing operations to produce fine and medium yarn count shirting fabrics.
DuPont-Akra Polyester (Charlotte, NC)	NuStart Industrial Park (Cuernavaca, Morelos)	Nonprofit partnership with Cone Mills, Guilford Mills, and Alpek S.A. de C.V.; 1999	Produce polyester staple fiber for apparel fabrics.
	Alpek S.A. de C.V and Tejin Limited (Monterrey, Nuevo Leon)	Joint venture; 1999	Produce polyester staple fiber for apparel fabrics.
	Alpek S.A. de C.V. (Altamira, Tamaulipas)	Joint venture; 2000	Produce polyester staple fiber for apparel fabrics.
Galey and Lord (New York, NY)	Dimmit Industries, S.A. (Piedras Negras, Coahuila)	Acquisition; 1996	Full-service finished garment production of pants and shorts.
Guilford Mills, Inc. (Greensboro, NC)	American Textil (Mexico City, Mexico)	Mexican subsidiary; 1997	Produce apparel and automotive fabrics.
	NuStart Industrial Park (Cuernavaca, Morelos)	Nonprofit partnership with Cone Mills, DuPont S.A. de C.V., and Alpek S.A. de C.V.; 1999	Produce and deliver apparel fabrics and finished garments to customer's specifications from a garment service center.
	Textile and apparel industrial park (Altamira, Tamaulipas)	Joint venture with Cone Mills; 2000	Knitting, dyeing, and finishing of apparel fabrics.
Tarrant Apparel Group (Los Angeles, CA)	Grupo Famian (Tehuacan, Puebla)	Acquisition; 1999	Provide finished apparel package production (cut, sew, launder, finish, and pack).

Source: Annual reports, 10-Ks, websites, press releases of listed companies, and USITC staff telephone conversations with representatives of listed companies.

Phantom Industries, a Canadian manufacturer of swimming wear; and Cia. Industrial de Moda and Festival Industries, Mexican apparel manufacturers. This partnership offers simplified production logistics and speedier product delivery because complementary textile and apparel operations are more strategically located. Such proximity also helps forge stronger vendor-supplier relationships and allows Nu-Start's partners to share resources and reportedly take advantage of economies of scale.⁷⁵

Dupont's Mexican polyester staple fiber operations are implementing Dupont's high-speed spinning technology to create efficient, low-cost production.⁷⁶ Several of the Mexican companies with which U.S. textile manufacturers have entered joint ventures, or that they have acquired, are Mexican industry leaders that have been at the forefront of technology applications.⁷⁷ Since the implementation of NAFTA, a growing number of Mexican textile and apparel manufacturers sought domestic and foreign investment to upgrade their facilities and become globally competitive. Currently, most if not all of the production occurring in NuStart and other facilities with vertically integrated operations is exported to the U.S. market.⁷⁸ Some companies, like Burlington, operate facilities that produce for the Mexican or other markets.

The emergence of vertically integrated textile and apparel manufacturing operations in Mexico is not limited to U.S. companies. A number of Asian firms are also establishing or planning integrated manufacturing facilities in Mexico to take advantage of Mexico's lower labor costs, proximity to the United States, and preferential market access under NAFTA.⁷⁹ The following Taiwan firms have reportedly set up operations or have announced plans to build vertically integrated manufacturing facilities in Mexico: (1) Hung Ho plans to create a textile complex in the Yucatan, (2) Nien Hsing Textile Corporation is spending \$132 million to build denim and jeans production facilities in Ciudad Victoria, Tamaulipas, and (3) Tuntex, a major Taiwan textile firm, announced plans to build a textile and petrochemical complex in Tampico, Tamaulipas; although corporate financial difficulties reportedly have delayed these plans.⁸⁰

⁷⁵ Kurt Salmon Associates Capital Advisors, "Moving to Mexico - The Battle Against Low Cost Asian Imports," *Textile Transactions & Trends*, Summer 1999, p. 2.

⁷⁶ S. Gray Maycumber, "DuPont Changes Its Role in Fiber Arena: Long-time Leader Goes From Lone Ranger to Team Player in Joint Ventures," *DNR*, May 3, 1999, p. 17.

⁷⁷ Deborah/Starlite, Cone Mills' partner in creating a full package apparel alliance, has a state-of-the-art vertical knit operation, which is a leading facility among Mexican companies in its use of automated cutting, modular manufacturing, and production monitoring systems (see "Cone Mills Announces Apparel Alliance," *Online Textile News*, June 25, 1999, found at Internet address <http://www.onlinetextilenews.com/news>, retrieved July 6, 1999).

⁷⁸ Government affairs representative of a leading apparel fabric manufacturer, telephone interview with USITC staff, Aug. 23, 1999.

⁷⁹ According to SECOFI, in December 1998, 603 textile and apparel firms had been established in Mexico with foreign direct investment. Of the total, 55 firms or 9.1 percent were Korean owned and 15 firms or 2.5 percent were Chinese owned. Taiwan corporations have also invested in Mexico's textile industry but data are not available on these operations since Taiwan facilities in Mexico have been established as U.S. subsidiaries and are counted as U.S. firms (see SECOFI, "Direccion General de Inversion Extranjera: Inversion Extranjera Directa en La Industria Textil," Dec. 1998, and Henry Tricks and Richard Lapper, "U.S.-Based Textiles Face Mexico Threat," *Financial Times*, Mar. 31, 1999).

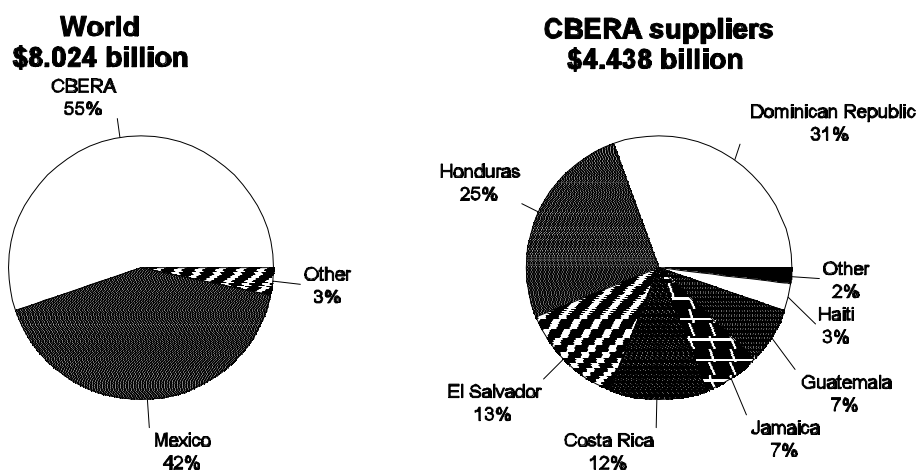
⁸⁰ Information about Asian operations has been gathered through secondary sources including the following: "Mexico Update," *Twin Plant News*, May 1999, p. 9 and Mar. 1999, p. 8; "Mexico Offers Growing Market," *Hong Kong Trader*, June 1999; "U.S.-Based Textiles Face Mexico Threat," *Financial Times*, Mar. 31, 1999; and "Massive Mexican Investment," *Textile Asia*, June 1998.

CBERA

In 1998, the CBERA countries accounted for 55 percent of the total value of U.S. components contained in apparel imports under the production-sharing provisions (figure 3-1) with the Dominican Republic, Honduras, and El Salvador, the leading CBERA sources. The sustained growth of these apparel imports from the Dominican Republic, whose shipments rose from \$1.6 billion in 1995 to \$2.2 billion in 1998, may be attributed not only to its proximity to the United States, skilled labor, and competitive apparel labor costs,⁸¹ but also to its ongoing expansion of foreign trade zone programs and incentives designed to attract foreign investment. During July-December 1998, the Dominican National Free Zones Council approved approximately \$18 million in business startups, of which nine firms were in textile manufacturing.⁸²

Figure 3-1

Apparel: U.S. content of imports under the production-sharing provisions of HTS Chapter 98, by top suppliers, and by leading CBERA suppliers, 1998



¹ Due to rounding, totals may not equal 100.

Source: Based on official statistics of the U.S. Department of Commerce.

⁸¹ In 1998, the hourly labor cost (including wages and other benefits) for the Dominican Republic's apparel industry was \$1.48 (see Werner International Management Consultants, "Hourly Labor Cost in the Apparel Industry," New York, NY, Apr. 1999, and Fernando Capellan, "Parity with Mexico - When?" *Apparel Industry Internacional*, Mar. 1999, found at Internet address <http://www.aiimag.com/aiieng/mar99stor5.html>, retrieved May 20, 1999).

⁸² U.S. Department of State telegram No. 003131, "DR: USITC Annual Caribbean Basin Investment Survey," prepared by U.S. Embassy, Santo Domingo, July 13, 1999.

Honduras was the fastest growing CBERA supplier of U.S. apparel imports under the production-sharing provisions during 1995-98. Its shipments rose by 132 percent to almost \$1.6 billion (table 3-9), despite minor hurricane damage to apparel assembly plants in October 1998.⁸³ U.S.-made components (U.S. content) contained in apparel imports under the production-sharing provisions from Honduras more than doubled during 1995-98, rising from \$479 million to \$1.1 billion. U.S. apparel investment in Honduras has increased in recent years following ratification in Honduras of its 1992 investment law combined with its free trade zones, low labor costs,⁸⁴ and reduced trade barriers. In 1998, U.S. investment in the Honduran apparel maquila sector totaled an estimated \$350 million.⁸⁵ Leading U.S. apparel manufacturers that have invested in Honduras include Fruit of the Loom, Buster Brown Apparel, Sara Lee, Best Form Foundation, Champion Jogbra, Inc., Jockey International, Levi Strauss, Oxford Industries, Warnaco, and Williamson Dickie Manufacturing.

U.S. apparel imports from El Salvador under the production-sharing provisions more than doubled during 1995-98, totaling \$1.0 billion. Imports increased by only 13 percent in 1998 compared with a 52-percent rise in 1997. U.S. apparel companies with assembly operations in El Salvador include Sara Lee, Fruit of the Loom, Brooklyn Manufactures, and Carolina Apparel International. Factors cited as contributing to slower growth include increased competition from Mexico as a result of NAFTA,⁸⁶ competition from lower priced Asian apparel stemming from the Asian financial crisis, and rising labor costs that are higher than those of the Dominican Republic and the maquila sector of Mexico.⁸⁷ Other constraints include El Salvador's high real estate costs and inadequate transportation infrastructure.⁸⁸

There have been several legislative proposals to provide quota and/or duty benefits to apparel produced in CBERA countries from fabric made in the CBERA region. In connection with these proposals, the Department of State sent telegrams to U.S. embassies in the region seeking information on the use of regional fabrics in CBERA production of apparel for export to the U.S. market.⁸⁹ As noted in table 3-9, U.S. apparel imports from CBERA countries under HTS 9802.00.80 in 1998 totaled \$6.9 billion, or 83 percent of total apparel imports from CBERA countries. The remainder of the CBERA apparel shipments (17 percent of the total, or \$1.4 billion) reportedly consisted mostly of garments assembled from fabrics made in Asia.⁹⁰ In

⁸³ U.S. Department of State telegram No. 004740, "Part II - Hurricane Mitch Economic Damage," prepared by U.S. Embassy, Tegucigalpa, Dec. 13, 1998.

⁸⁴ The hourly labor cost (including social benefits and fringes) for the Honduran apparel industry was \$0.91 (see Werner International Management Consultants, "Hourly Labor Cost in the Apparel Industry," New York, NY, Apr. 1999).

⁸⁵ U.S. Department of State telegram No. 002624, "Honduras 2000 - CCG's Executive Summary," prepared by U.S. Embassy, Tegucigalpa, Aug. 5, 1999, and Value Line Publishing, "Oxford Industries," *Value Line*, Aug. 20, 1999, p. 1619.

⁸⁶ U.S. Department of State telegram No. 001866, "USITC Annual Caribbean Basin Investment Survey," prepared by U.S. Embassy, San Salvador, June 2, 1999.

⁸⁷ U.S. Department of State telegram No. 002250, "Differing Visions of El Salvador's Maquila Industry," prepared by U.S. Embassy, San Salvador, June 22, 1999.

⁸⁸ U.S. Department of State telegram No. 001400, "Salvadoran Free Trade Zone Expansion to Include a City of Workers," prepared by U.S. Embassy, San Salvador, Apr. 24, 1999.

⁸⁹ U.S. Department of State telegram No. 145355, "Textiles: Request for Regional Fabric Information," Washington, DC, Aug. 3, 1999.

⁹⁰ A number of firms based in Korea and Taiwan produce apparel in Central America for both local consumption and export to the United States. Local sources report that Asian-made fabrics account for a

(continued...)

addition, an unknown but believed-to-be small portion of the CBERA apparel shipments consisted of garments made from fabrics manufactured in CBERA countries (“regional fabrics”). Guatemala⁹¹ and El Salvador manufacture most of the regional fabrics used in CBERA production of apparel for export to the United States.⁹² Regional fabrics accounted for about 7 percent (\$60 million) of the raw materials used in El Salvador’s production of apparel for export to the United States and about 15 to 18 percent of Nicaragua’s apparel exports to the United States.⁹³ Costa Rica has three mills producing knit or woven fabrics but there was no known recent use of local or other regional fabrics in that country’s production of apparel for export to the United States.⁹⁴ The available information also shows that the use of regional fabrics in apparel imports from other CBERA countries was small.

Implications for the Competitiveness of the North American Textile and Apparel Industry

The long-term outlook for U.S. apparel production-sharing trade with CBERA countries is somewhat clouded by U.S. WTO commitments to eliminate U.S. import quotas by 2005. The ongoing phase out of U.S. import quotas under the WTO textile agreement will gradually erode the preferences that CBERA countries now have under the GALs.⁹⁵ As a result, U.S. producers may gradually shift some of their assembly operations from CBERA countries to Mexico or source the garments from Asia where there is little use of U.S. fabrics in apparel production.

As industry sources indicate, the evolution of fully integrated textile manufacturing in Mexico suggests that the U.S. apparel and textile industries are increasingly viewing regional or hemispheric manufacturing as the key to long-term survival.⁹⁶ As many of these operations have recently been established, it is too early to assess accurately their impact on the competitiveness of

⁹⁰ (...continued)

significant portion of the fabrics used in the Asian apparel operations in Central America. Most of the Korean firms in Central America produce apparel in Guatemala and most of the Taiwan firms make apparel in Honduras and El Salvador.

⁹¹ According to a trade source, Guatemala has 44 textile mills and 7 wet processing laundries. See Brenda Lloyd, “Guatemala Government Extols Its Local Apparel Industry,” *DNR*, Apr. 24, 1999.

⁹² According to the U.S. Department of State, Guatemala and El Salvador are “where more active textile [fabric manufacturing] industries operate” in the CBERA region. See U.S. Department of State telegram No. 002301, “Textiles: Regional Fabric in Costa Rican Apparel Exports to the U.S.,” prepared by U.S. Embassy, San Jose, Costa Rica, Aug. 31, 1999.

⁹³ U.S. Department of State telegrams 003222, “Textiles: Request for Regional Fabric Information,” prepared by U.S. Embassy, San Salvador, Sept. 17, 1999, and No. 002789, “Textiles: Regional Fabric Information,” prepared by U.S. Embassy, Managua, Sept. 22, 1999.

⁹⁴ U.S. Department of State telegram No. 002301, “Textiles: Regional Fabric in Costa Rican Apparel Exports to the U.S.,” prepared by U.S. Embassy, San Jose, Costa Rica, Aug. 31, 1999.

⁹⁵ For more information on the elimination of U.S. quotas on textiles and apparel, see USITC, *Shifts in U.S. Merchandise Trade in 1998* (investigation No. 332-345), USITC publication 3220, Aug. 1999, pp. 4-5 and 4-6.

⁹⁶ In remarks attributed to Ed Van Wely, DuPont senior vice president, “The growth of the textile business there [in Mexico] is substantially reducing the trend of Asian textile products coming into the United States. It may actually reverse it...A lot of fabric and fiber production will move there, as well as apparel. But it is also a way to increase the United States’ fiber and fabric production within NAFTA and reduce trade away from North America.” (see S. Gray Maycumber, “DuPont Changes Its Role in Fiber Arena,” *DNR*, May 3, 1999, p. 17).

the U.S. textile and apparel industries. According to major textile manufacturers like Burlington Industries, Cone Mills,⁹⁷ and Guilford Mills, however, the establishment of vertically integrated operations in Mexico, as well as integrated manufacturing networks, is likely to help those firms recapture some of the business previously lost to Asian competitors in the North American market.⁹⁸

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⁹⁷ In addition to its three joint ventures in Mexico, Cone Mills announced in July 1999 a plan to enter a strategic alliance with Korasma, a Guatemalan firm reputed to be one of the most versatile apparel manufacturers in Latin America. The alliance will reportedly offer customers full package apparel service (fabrics, apparel manufacturing, technical expertise, and the handling of logistics) that includes one-stop shopping. "Cone Mills Announces Strategic Alliance with Koramsa of Guatemala," PR Newswire, July 7, 1999, Newscast Mail Alert.

⁹⁸ Burlington Industries, "Burlington to Open Garment Service Center," news release, June 1, 1998, found at Internet address <http://www.burlington.com/news/releases>, retrieved Aug. 23, 1999.

APPENDIX A
THE CUSTOMS TREATMENT OF
CERTAIN AMERICAN GOODS
RETURNED (HTS 9802.00.60, 9802.00.80,
AND 9802.00.90) AND “USER FEES”

The tariff provisions discussed in this appendix provide conditional duty treatment to goods that are exported from the United States, advanced in value or improved in condition abroad by assembly or particular processes, and then entered into the customs territory. The duty reductions or exemptions so accorded to eligible goods do not affect their classification in appropriate provisions of chapters 1 through 97 of the *Harmonized Tariff Schedule of the United States* (HTS); statistical data are “double reported” using both “permanent” and chapter 98 tariff categories. The importer must claim chapter 98 duty treatment pursuant to Customs Service regulations (including 19 C.F.R. 10.9, 10.11-10.26) and provide any necessary information to show compliance. Subheading 9802.00.60 and heading 9802.00.80 of the HTS were discussed in detail in earlier Commission reports on production sharing; these provisions, along with heading 9802.00.90, can be found in the HTS. Current regulations should always be consulted by importers, and rulings may be obtained concerning goods’ eligibility for and status under these provisions. The customs treatment available to goods resulting from qualifying Caribbean Basin assembly and processing, the trade agreement status of these chapter 98 provisions and their relation to preferential tariff programs, and the special access program are briefly outlined below. Last, a short update on the merchandise processing (user) fee is included.

Caribbean Basin Assembly or Processing

Section 222 of the Customs and Trade Act of 1990 enacted U.S. note 2(b) to subchapter II of HTS chapter 98 to provide duty rates for and the origin of U.S.-fabricated components, materials, or ingredients exported for assembly or processing in a designated Caribbean Basin Economic Recovery Act (CBERA) beneficiary country. Previously, some goods resulting from such assembly or processing could not qualify under CBERA rules of preference for duty-free entry under provisions of HTS chapters 1 through 97 because (1) no substantial transformation in the beneficiary country was found to have occurred, so that the good was not a “product of” an eligible country, or (2) inadequate value was added in or attributable to the beneficiary country, or (3) the goods otherwise were considered preference-ineligible.¹

The legal note sets two aspects of the customs treatment of these goods. First, these CBERA-assembled goods are not to be deemed foreign articles; this legal language suggests by implication that the goods have domestic (U.S.) origin, but Customs regulations do not so provide.² Second, these goods are not subject to duty upon entry into the U.S. customs territory.³ Though the duty treatment of such goods is set forth in a tariff legal note, and not the rates-of-duty columns of tariff headings, the goods must be entered under the pertinent chapter 98 provision. The legal note’s rate of duty is “free” instead of the duty rates⁴ enacted by Congress for heading 9802.00.80; a nonlegal 10-digit statistical reporting number (9802.00.8040) was created to record trade in assembled goods entered under the legal note. Congress has

¹ The CBERA requires that the cost or value of materials from one or more beneficiary countries plus the direct costs of processing (including labor) therein must total 35 percent of the appraised value of goods for which duty-free entry is claimed, and that the goods be a “product of” a beneficiary country. The cost or value of U.S. materials (not counting those of Puerto Rico) may be counted toward that value threshold in an amount not to exceed 15 percent of the finished goods’ appraised value upon entry. See HTS general note 7.

² See 19 C.F.R. 12.130(c)(1).

³ No blanket duty exemption for goods of U.S. origin—even those imported by or for most U.S. Government agencies—is afforded elsewhere in the HTS; duties must generally be paid each time the goods are entered unless the HTS specifies another tariff treatment. See general note 1 to the HTS.

⁴ Goods described in heading 9802.00.80 are partially dutiable if the ordinary tariff provisions in chs. 1 through 97 provide for a duty rate other than “free,” but no duty is payable on the U.S. content.

considered proposals to create a discrete tariff provision for these goods, to clarify the requirements and to simplify administration, but to date no such provision has been enacted.

Trade Agreement Status and Special Tariff Treatment

The column 1-general rates of duty in the chapter 98 production-sharing provisions, unlike most general rates in HTS chapters 1 through 97, are not "bound" concession rates under Schedule XX to the General Agreement on Tariffs and Trade (known as GATT 1994), except as they apply to goods certified for use in civil aircraft.⁵ Thus, Schedule XX requires only that the United States somehow provide the agreed duty treatment for these civil aircraft goods in the HTS. Nor are note 2(b), with its special treatment for CBERA goods, or heading 9802.00.90 (see below) included in Schedule XX. Moreover, because these tariff provisions fall in chapter 98—not part of the nomenclature structure of the Harmonized Commodity Description and Coding System (HS)—the international convention establishing the HS does not refer to or require them. Thus, these tariff rate lines are primarily domestic in their legal significance and could be changed or repealed—though such an action would increase duties on the subject goods by providing that the U.S. value in such goods would not be exempt. Two U.S. free-trade agreements—one with Israel⁶ and the other with Canada and Mexico (the North American Free Trade Agreement or NAFTA)—and the Automotive Products Trade Act (APTA) require that the United States provide and continue this special duty treatment for eligible goods, however it may be reflected in the HTS. Accordingly, various Presidential proclamations have included preferential duty rates in column 1-special for the production-sharing provisions of chapter 98 to carry out these U.S. obligations. Eligible goods entered under the civil aircraft program are also accorded a "free" rate to meet GATT obligations.

On nonpreferential shipments covered by production-sharing provisions, the general duty rates from the applicable tariff categories in chapters 1 through 97 must be paid on the declared foreign value, including costs of labor. Many of these general rates are being reduced in annual stages pursuant to Uruguay Round concessions. For shipments of preference-eligible goods imported under these chapter 98 provisions, HTS column 1-special states that the duty payable is computed by applying the otherwise applicable special duty rate from chapters 1 through 97 to the foreign value. In most instances, the special rate provided in chapters 1 through 97 for the eligible preference programs is "free" and no duty advantage from claiming entry under chapter 98 would appear possible. The designated preference programs, as indicated above, are the APTA, the Agreement on Trade in Civil Aircraft, the NAFTA, and the U.S.-Israel FTA, under the terms of the corresponding general notes to the HTS.

⁵ Pursuant to concessions negotiated in the Uruguay Round of multilateral negotiations, the duty rate for eligible civil aircraft goods is bound at "free." A tariff binding is a stated ceiling: GATT contracting parties giving bindings on individual tariff categories agree not to exceed the bound rates other than in circumstances provided for in the GATT (such as actions taken for emergency balance of payments reasons). If a country exceeds a bound rate in cases not covered by any GATT provision, other parties may initiate dispute settlement, undertake limited retaliation, or request compensation. U.S. tariff bindings and other concessions are enumerated in schedule XX; other numbered GATT schedules list the bindings and concessions of other contracting parties.

⁶ The U.S.-Israel FTA provides that all goods described by and imported under these two HTS provisions must be admitted free of duty, along with all other products of Israel (HTS general note 8).

Where the column 1-special rate for goods of Mexico in provisions of chapters 1 through 97 is not “free,”⁷ a different situation exists. If a good is eligible for a NAFTA tariff preference under the terms of general note 12 as an originating good and qualifies to be marked under Customs regulations (19 C.F.R. part 102) as a good of Mexico, the HTS indicates that importers can claim the “MX” special duty rate on non-U.S. content from the normal tariff category for the goods. If Customs agrees that the goods originate in North America, that special duty rate (other than “free”) would apply to the non-U.S.-origin part of the shipment’s value, and the importer could claim the U.S. value as free of duty under chapter 98. However, if goods originate in the NAFTA region but do not qualify to be marked as goods of a single NAFTA country, Customs regulations provide that the special NAFTA rate of duty applicable to the last NAFTA country of significant processing would be assessed on the foreign content. If the “marking rules” indicate that an originating good is a product of the United States for NAFTA purposes, and the good was merely advanced in value or improved in condition in another NAFTA country, the rate of duty for the last NAFTA country of processing would be imposed. (See 19 C.F.R. 102.19.) In addition, a special tariff category, heading 9802.00.90, applies only to textile and apparel articles assembled in Mexico from U.S.-formed-and-cut fabric components and has a general rate of duty of “free” for qualifying goods; these imports need not be originating goods under HTS general note 12.⁸ Similar customs treatment may be given to certain goods covered by the CBERA or the Andean Trade Preference Act that have reduced rates of duty (rather than “free” rates) in the special subcolumn. The other preference programs enumerated in the chapter 98 provisions’ special subcolumn provide “free” rates of duty to eligible goods.

Special Access Program

Under the CBERA’s statutory exclusions, its tariff preferences cannot apply to textile and apparel articles subject to textile agreements, although such goods—including those assembled in whole or in part from U.S. inputs—are a significant part of trade with beneficiary countries. Pursuant to U.S. law (7 U.S.C. 1854 and pertinent regulations) and to bilateral arrangements negotiated under the former Agreement Regarding Trade in Textiles,⁹ the United States negotiated bilateral agreements with many countries to limit and/or monitor imports of enumerated textile and apparel products. The combined product scope of these agreements as of the date of enactment of the CBERA is considered to define the boundaries of the statutory exclusion from the CBERA tariff preference. Accordingly, goods of cotton, of wool/fine animal hair, of man-made fibers, or of blends of those materials cannot enter free of duty under the CBERA. In view of the impact of the exclusion from duty-free entry, a partial relaxation of otherwise applicable restrictions is accorded by the United States in limited circumstances.

Statistical reporting number 9802.00.8015 is used by importers to enter "articles eligible pursuant to bilateral textile agreements for entry under a Special Access Program and entered in compliance with

⁷ NAFTA-eligible goods of Canada enter free of duty as of January 1, 1998.

⁸ See also subheadings 9906.98.02 and 9906.98.03 for provisions applicable to suit-type jackets that contain foreign-origin interlining fabrics; these goods received duty-free entry through August 1999.

⁹ Commonly called the Multifiber Arrangement, or MFA. Under the Agreement on Textiles and Clothing of GATT 1994, MFA-authorized quotas must be eliminated as of Jan. 1, 2005, fully integrating this sector into GATT 1994 disciplines. As restrictions are gradually removed under this agreement, the Special Access Program (SAP) and other preferential regimes also lose their previous access advantages.

procedures established by the Committee for the Implementation of Textile Agreements (CITA).¹⁰ Importers report the value of U.S.-fabricated components in the merchandise and the shipment's dutiable value (total value less the value of U.S.-fabricated components), pursuant to statistical note 1(b), subchapter II, chapter 98. The Special Access Program (SAP) is available only to designated CBERA beneficiary countries that have bilateral textile agreements with the United States.¹¹ The former Special Regime (SR), which had applied to textile and apparel products of Mexico, was replaced by other preference provisions under the NAFTA as of January 1, 1994—primarily heading 9802.00.90.¹²

SAP bilateral agreements have contained two types of measures: guaranteed access levels (GALs) for apparel assembled in the particular CBERA countries from U.S.-formed-and-cut fabric, and regular quota limits for apparel of the applicable MFA categories but not of such fabric. In general terms, a GAL would be set for each MFA category covered by a SAP bilateral agreement, along with a specific limit (SL) or a designated consultation level (DCL) for regular quotas. Exporters have been able to request increases in GALs unless market disruption occurs, while SLs are subject to agreed allowable annual percentage increases, and DCLs are raised only after bilateral consultation. GAL shipments under heading 9802.00.80 generally have duties assessed only on the value added overseas.¹³ Special CBI¹⁴ Export Declarations must be filed at the time the U.S.-formed-and-cut fabric parts are exported from the customs territory, and Customs can request documentary proof concerning such garment parts during Post-Entry Compliance Reviews. According to the Office of Textiles and Apparel, foreign-origin findings, trimmings, and elastic strips not exceeding 25 percent of the cost of components in the assembled product do not disqualify an apparel article from entry under the GAL/SAP, but other components must be formed and cut in the United States. Also, CBERA assemblers must file declarations, and goods must be accompanied by the textile visas and certificates of origin specified in the bilaterals.

User Fees

Enacted in 1986 as a temporary revenue measure and set at 0.22 percent ad valorem on imported goods, the so-called user fee has been continued to help defray costs of Customs Service operations. Customs regulations treat the fee—properly known as the merchandise processing fee—as a customs duty; it is applied to the dutiable value or cost (the foreign value added) of imports under the three production-sharing provisions of HTS chapter 98 covered by this report, but not to the nondutiable portion of value attributable to domestic materials. From October 1, 1987, through December 31, 1989, the fee was 0.17 percent ad valorem; it was later restructured and continued at the 0.17-percent rate but with a floor and a cap as of October 1, 1990; and it reached a level of 0.21 percent ad valorem following enactment of the Uruguay Round Agreements Act. Under section 2418 of the Miscellaneous Trade and Technical

¹⁰ See HTS ch. 98, subch. II, for the legal text of the provisions and applicable notes, and Customs regulations at 19 C.F.R. 12.130-131. The Office of Textiles and Apparel of the U.S. Department of Commerce can be consulted for further information.

¹¹ Announced by President Reagan on Feb. 20, 1986, and implemented June 11, 1986 (51 FR 21208).

¹² See HTS heading 9802.00.90 and the notes to section XI. The special regime was discussed in earlier Commission reports on production sharing.

¹³ *Ibid.*, pp. 1-2. New origin rules for this sector are based upon enumerated changes of tariff classification (from inputs to more advanced goods); some administrative practices changed because of Customs' implementation of the Uruguay Round Agreements Act. See 19 C.F.R. 102.21, as well as sections 12.130-12.132.

¹⁴ Caribbean Basin Initiative.

Corrections Act of 1999,¹⁵ three categories of fees for passengers aboard commercial vessels were specified, and separate provisions established particular budgetary uses (including overtime pay for some officials and funding for the automated commercial systems and a national test of the automation test regarding reconciliation of entries) for the merchandise processing fees collected at Customs ports of entry. Current Customs regulations concerning the user fee appear in 19 C.F.R. 24.23, with the fee set at 0.21 percent ad valorem for formal entries and with a minimum fee of \$25 and a cap of \$485 per entry. For the chapter 98 provisions, 19 C.F.R. 24.23(c)(2) provides that, in addition to the ad valorem fee on dutiable value, the surcharge and specific fees do apply to the goods entered there. A \$3 surcharge is added to each entry processed manually, informal entries are assessed fees of from \$2 to \$9 each, and other rules govern the aggregation of the ad valorem fee for particular monthly entry programs. Customs regulations also set other fees, such as the harbor maintenance fee.

Under article 403 of the U.S.-Canada Free-Trade Agreement, which has since been suspended, goods originating in the territory of Canada were assessed the merchandise processing fee under a negotiated phase-out scheme, with the fee scheduled to be eliminated as of January 1, 1994. This previously agreed treatment was continued under the NAFTA when it was implemented on January 1, 1994, and now is codified in 19 C.F.R. 24.23(c)(3), so that no fees are collected on "goods of Canada under the terms of general note 12 to the HTS."¹⁶ Goods of Mexico were assessed the ordinary fee until June 30, 1999, as of which date no such fee can be charged under article 310 and annex 310.1 of the NAFTA and section 204 of the NAFTA Implementation Act. Regulatory language to codify this status was added to section 24.23(c)(3) effective August 3, 1999.¹⁷

Customs regulations separately specify the user fee status of other classes of goods, such as agricultural products of the United States that are processed and packed in a U.S. foreign-trade zone. Of greatest significance among these regulations is the provision¹⁸ specifying that goods from most non-NAFTA countries entered under HTS chapter 98 are subject to the imposition of the merchandise processing fee, with limited exceptions for products of preference-eligible countries (notably CBERA beneficiaries and the insular possessions of the United States). All products of Israel, under the free-trade agreement with that country, are eligible for exemption from user fees for such time as the United States Trade Representative determines that reciprocal treatment for U.S. products exists, pursuant to section 112 of the Customs and Trade Act of 1990 and 19 C.F.R.24.23(c)(5).

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¹⁵ Public Law 106-36, 113 Stat. 127, 176, effective on and after July 25, 1999.

¹⁶ This is a term of art in the HTS covering goods imported from and the product of Canada (even if not marked as such) that qualify for NAFTA duty rates as originating in the NAFTA region. This test varies from the normal rule requiring that imported goods be marked with a single country of origin.

¹⁷ *Customs Bulletin and Decisions*, vol. 33, No. 33, Aug. 18, 1999.

¹⁸ 19 C.F.R.24.23(c)(2).

APPENDIX B
STATISTICAL TABLES

Table B-1

U.S. imports for consumption under HTS provisions 9802.00.60 and 9802.00.80,¹ 1971-1998

(Million dollars)

Year	Total value		Dutiable value			U.S. content value			Total
	9802.00.60	9802.00.80	Total	9802.00.60	9802.00.80	Total	9802.00.60	9802.00.80	
1971	199.4	2,566.4	2,765.8	75.1	2,030.8	2,105.9	124.3	535.6	659.9
1972	318.3	3,090.5	3,408.8	130.3	2,410.1	2,540.4	187.9	680.4	868.3
1973	462.6	3,784.5	4,247.1	212.9	3,025.4	3,238.3	249.7	759.1	1,008.8
1974	543.7	4,828.1	5,371.8	240.4	3,818.6	4,059.0	303.3	1,009.5	1,312.8
1975	454.6	4,707.8	5,162.4	192.6	3,703.9	3,896.5	262.0	1,003.9	1,265.9
1976	474.0	5,247.5	5,721.5	199.2	3,976.2	4,175.4	274.8	1,271.3	1,546.1
1977	465.1	6,723.4	7,188.5	190.7	5,021.4	5,212.1	274.4	1,702.0	1,976.4
1978	398.1	9,337.1	9,735.2	154.8	6,988.9	7,143.7	243.2	2,348.3	2,591.5
1979	407.7	11,559.3	11,967.0	172.8	8,468.3	8,641.1	234.9	3,091.0	3,325.9
1980	254.1	13,762.2	14,016.5	83.5	10,178.2	10,261.8	170.5	3,584.0	3,754.7
1981	256.5	15,924.0	16,180.8	80.3	11,653.9	11,734.2	176.2	4,270.3	4,446.6
1982	358.0	17,950.8	18,308.8	116.0	13,473.2	13,589.2	242.0	4,477.5	4,719.5
1983	341.5	21,234.4	21,575.9	112.5	16,076.8	16,189.3	229.0	5,157.6	5,386.6
1984	450.2	28,122.4	28,572.6	140.9	21,221.2	21,362.1	309.3	6,901.2	7,210.5
1985	419.7	30,115.4	30,535.1	144.6	24,565.7	24,710.3	275.0	5,549.7	5,824.7
1986	465.5	36,031.5	36,496.9	157.1	30,059.3	30,216.4	308.4	5,972.1	6,280.5
1987	953.9	67,595.1	68,549.0	538.4	55,067.9	55,606.2	415.6	12,527.2	12,942.8
1988	929.1	72,803.5	73,732.6	459.2	56,449.4	56,908.5	469.8	16,354.1	16,823.9
1989	141.3	73,031.8	73,173.1	444.2	54,110.5	54,554.7	697.1	18,921.3	19,618.4
1990	1,379.8	75,122.2	76,502.0	561.4	54,302.9	54,864.3	818.4	20,819.2	21,637.6
1991	1,142.1	56,412.8	57,554.9	514.3	42,521.2	43,035.5	627.8	13,891.6	14,519.4
1992	1,003.4	55,437.6	56,441.0	406.5	40,676.5	41,083.0	596.9	14,761.1	15,358.0
1993	836.6	56,526.4	57,363.0	280.3	39,522.7	39,803.0	556.3	17,003.7	17,560.0
1994	600.3	58,709.7	59,310.0	219.2	39,573.8	39,793.0	381.2	19,135.8	19,517.0
1995	503.4	60,376.6	60,880.0	126.6	38,643.4	38,770.0	376.8	21,733.2	22,110.0
1996	549.6	66,964.9	67,514.5	154.8	43,394.9	43,549.7	394.8	23,570.0	23,964.8
1997	509.7	78,657.0	79,166.7	145.8	52,455.8	52,601.7	363.8	26,201.2	26,565.0
1998	296.8	73,770.8	74,067.6	87.6	48,767.4	48,855.0	209.2	25,003.4	25,212.6

¹ HTS 9802.00.80 includes HTS 9802.00.90.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted. Minor adjustments to official statistics were made to correct cases of misreporting.

Table B-2

**U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98:
Total imports, imports under HTS PSP, and U.S. content, by principal sources, 1995-1998**

Source	1995					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	<i>Million dollars</i>			<i>Percentage</i>		
Germany	37,126	6,526	153	5.0	10.7	0.7
Japan	122,402	6,069	360	16.5	10.0	1.6
United Kingdom	26,594	1,628	120	3.6	2.7	0.5
Canada	144,882	1,539	605	19.6	2.5	2.7
Sweden	6,208	1,375	21	0.8	2.3	0.1
Belgium	5,996	812	35	0.8	1.3	0.2
France	16,497	431	72	2.2	0.7	0.3
Spain	3,814	174	27	0.5	0.3	0.1
Netherlands	6,309	151	34	0.9	0.2	0.2
Italy	16,339	129	30	2.2	0.2	0.1
Ireland	4,067	73	18	0.5	0.1	0.1
Austria	1,951	73	32	0.3	0.1	0.1
All other	21,469	101	19	2.9	0.2	0.1
Total, developed countries	413,652	19,081	1,526	55.9	31.3	6.9
Mexico	61,721	24,962	12,833	8.3	41.0	58.0
Malaysia	17,401	2,778	1,313	2.4	4.6	5.9
Dominican Republic	3,385	1,965	1,278	0.5	3.2	5.8
Korea	24,026	1,798	600	3.2	3.0	2.7
Philippines	6,990	1,749	785	0.9	2.9	3.6
Taiwan	28,875	1,193	424	3.9	2.0	1.9
Singapore	18,493	958	194	2.5	1.6	0.9
China	45,370	873	109	6.1	1.4	0.5
Thailand	11,337	786	461	1.5	1.3	2.1
Costa Rica	1,842	707	472	0.2	1.2	2.1
Honduras	1,441	676	480	0.2	1.1	2.2
Hong Kong	10,232	637	323	1.4	1.0	1.5
Guatemala	1,515	521	259	0.2	0.9	1.2
El Salvador	813	497	276	0.1	0.8	1.3
Jamaica	838	456	369	0.1	0.7	1.7
Indonesia	7,340	410	75	1.0	0.7	0.3
Colombia	3,807	272	169	0.5	0.4	0.8
Brazil	8,989	178	20	1.2	0.3	0.1
Haiti	129	79	54	(¹)	0.1	0.2
India	5,702	38	4	0.8	0.1	(¹)
All other	65,764	266	86	8.9	0.4	0.4
Total, less developed countries	326,008	41,800	20,584	44.1	68.7	93.1
Grand total . . .	739,660	60,880	22,110	100.0	100.0	100.0

See note(s) at end of table.

Table B-2--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98:
Total imports, imports under HTS PSP, and U.S. content, by principal sources, 1995-1998

Source	1996					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	<i>Million dollars</i>			<i>Percentage</i>		
Japan	114,762	7,797	548	14.5	11.5	2.1
Germany	39,215	7,414	142	5.0	11.0	0.5
Sweden	7,118	1,758	15	0.9	2.6	0.1
United Kingdom	28,574	1,758	124	3.6	2.6	0.5
Canada	156,299	1,579	627	19.8	2.3	2.4
Belgium	6,745	845	35	0.9	1.3	0.1
France	17,914	408	55	2.3	0.6	0.2
Netherlands	6,582	182	41	0.8	0.3	0.2
Spain	4,231	160	8	0.5	0.2	(¹)
Italy	18,036	97	29	2.3	0.1	0.1
Ireland	4,749	87	32	0.6	0.1	0.1
Austria	2,082	61	21	0.3	0.1	0.1
All other	23,296	111	13	2.9	0.2	(¹)
Total, developed countries	429,602	22,256	1,690	54.3	33.0	6.4
Mexico	74,179	27,925	15,483	9.4	41.4	58.3
Malaysia	17,771	2,382	930	2.2	3.5	3.5
Dominican Republic	3,582	2,104	1,737	0.5	3.1	6.5
Philippines	8,174	1,805	1,058	1.0	2.7	4.0
Korea	22,532	1,787	755	2.9	2.6	2.8
China	51,209	1,153	180	6.5	1.7	0.7
Taiwan	29,797	1,048	510	3.8	1.6	1.9
Honduras	1,797	981	983	0.2	1.5	3.7
Singapore	20,249	964	258	2.6	1.4	1.0
Thailand	11,324	789	385	1.4	1.2	1.4
Costa Rica	1,963	694	568	0.2	1.0	2.1
El Salvador	974	605	544	0.1	0.9	2.0
Guatemala	1,694	580	299	0.2	0.9	1.1
Hong Kong	9,820	579	354	1.2	0.9	1.3
Indonesia	8,079	546	72	1.0	0.8	0.3
Jamaica	828	444	352	0.1	0.7	1.3
Colombia	4,421	216	160	0.6	0.3	0.6
Brazil	8,871	144	21	1.1	0.2	0.1
Haiti	143	102	102	(¹)	0.2	0.4
Hungary	676	46	6	0.1	0.1	(¹)
All other	82,785	366	120	10.5	0.5	0.4
Total, less developed countries	360,868	45,258	24,875	45.7	67.0	93.6
Grand total . . .	790,470	67,514	26,565	100.0	100.0	100.0

See note(s) at end of table.

Table B-2--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98:
Total imports, imports under HTS PSP, and U.S. content, by principal sources, 1995-1998

Source	1997					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	<i>Million dollars</i>			<i>Percentage</i>		
Japan	120,480	15,667	548	14.0	19.8	2.1
Germany	42,793	8,541	142	5.0	10.8	0.5
United Kingdom	32,412	1,665	124	3.8	2.1	0.5
Canada	167,881	1,511	627	19.5	1.9	2.4
Sweden	7,265	1,433	15	0.8	1.8	0.1
Belgium	7,870	1,105	35	0.9	1.4	0.1
France	20,126	323	55	2.3	0.4	0.2
Netherlands	7,269	173	41	0.8	0.2	0.2
Spain	4,547	156	8	0.5	0.2	(¹)
Italy	19,228	119	29	2.2	0.2	0.1
Ireland	5,823	105	32	0.7	0.1	0.1
Austria	2,202	59	21	0.3	0.1	0.1
All other	24,512	58	13	2.8	0.1	(¹)
Total, developed countries	462,407	30,915	1,690	53.6	39.0	6.4
Mexico	85,005	28,883	15,483	9.9	36.5	58.3
Dominican Republic	4,308	2,669	1,737	0.5	3.4	6.5
Philippines	10,419	2,063	1,058	1.2	2.6	4.0
Malaysia	17,888	1,911	930	2.1	2.4	3.5
Korea	22,939	1,881	755	2.7	2.4	2.8
Honduras	2,320	1,380	983	0.3	1.7	3.7
China	61,996	1,319	180	7.2	1.7	0.7
Taiwan	32,474	1,248	510	3.8	1.6	1.9
El Salvador	1,345	912	544	0.2	1.2	2.0
Singapore	19,982	904	258	2.3	1.1	1.0
Costa Rica	2,322	851	568	0.3	1.1	2.1
Thailand	12,546	750	385	1.5	0.9	1.4
Hong Kong	10,235	720	354	1.2	0.9	1.3
Guatemala	1,984	652	299	0.2	0.8	1.1
Indonesia	9,055	517	72	1.0	0.7	0.3
Jamaica	721	430	352	0.1	0.5	1.3
Colombia	4,615	268	160	0.5	0.3	0.6
Brazil	9,510	259	21	1.1	0.3	0.1
Haiti	188	140	102	(¹)	0.2	0.4
Vietnam	390	78	8	(¹)	0.1	(¹)
All other	89,777	415	118	10.4	0.5	0.4
Total, less developed countries	400,019	48,252	24,875	46.4	61.0	93.6
Grand total . . .	862,426	79,167	26,565	100.0	100.0	100.0

See note(s) at end of table.

Table B-2--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98:
Total imports, imports under HTS PSP, and U.S. content, by principal sources, 1995-1998

Source	1998					
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
	Million dollars			Percentage		
Japan	121,313	12,363	506	13.4	16.7	2.0
Germany	49,796	9,158	114	5.5	12.4	0.5
Sweden	7,821	2,020	23	0.9	2.7	0.1
Belgium	8,387	1,520	45	0.9	2.1	0.2
United Kingdom	34,617	1,381	132	3.8	1.9	0.5
Canada	174,685	428	194	19.2	0.6	0.8
France	23,371	198	38	2.6	0.3	0.1
Netherlands	7,555	185	33	0.8	0.3	0.1
Spain	4,749	138	11	0.5	0.2	(¹)
Italy	20,792	115	31	2.3	0.2	0.1
Ireland	8,311	111	24	0.9	0.2	0.1
Austria	2,446	73	20	0.3	0.1	0.1
All other	25,667	66	14	2.8	0.1	0.1
Total, developed countries	489,510	27,756	1,184	53.9	37.5	4.7
Mexico	93,017	27,162	14,484	10.2	36.7	57.4
Dominican Republic	4,445	2,806	1,766	0.5	3.8	7.0
Philippines	11,875	2,254	1,129	1.3	3.0	4.5
Malaysia	18,817	1,831	915	2.1	2.5	3.6
Honduras	2,544	1,604	1,142	0.3	2.2	4.5
Korea	23,701	1,601	786	2.6	2.2	3.1
Taiwan	32,985	1,511	543	3.6	2.0	2.2
China	70,815	1,477	232	7.8	2.0	0.9
El Salvador	1,436	1,023	592	0.2	1.4	2.3
Costa Rica	2,742	845	552	0.3	1.1	2.2
Guatemala	2,071	707	306	0.2	1.0	1.2
Thailand	13,366	664	367	1.5	0.9	1.5
Hong Kong	10,427	559	230	1.1	0.8	0.9
Singapore	18,216	556	151	2.0	0.8	0.6
Jamaica	736	386	313	0.1	0.5	1.2
Indonesia	9,262	298	54	1.0	0.4	0.2
Colombia	4,442	264	156	0.5	0.4	0.6
Haiti	272	217	159	(¹)	0.3	0.6
Vietnam	520	79	9	0.1	0.1	(¹)
Nicaragua	453	67	47	(¹)	0.1	0.2
All other	95,997	401	96	10.6	0.5	0.4
Total, less developed countries	418,137	46,311	24,028	46.1	62.5	95.3
Grand total . . .	907,647	74,068	25,213	100.0	100.0	100.0

¹Less than 0.5 percent.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-3

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1995			1996		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Agricultural products	37,806,506	7,503	1,637	41,526,077	2,560	1,171
Forest products	29,154,780	83,280	42,002	28,957,450	118,333	56,007
Chemicals, coal, petroleum, natural gas, and related products:						
Fabricated plastic and rubber products	12,955,349	157,175	85,854	13,383,416	183,169	95,504
Other energy and chemical products	99,832,855	111,309	70,903	120,493,520	145,335	73,245
Total	112,788,204	268,483	156,757	133,876,936	328,504	168,749
Textiles, apparel, and footwear:						
Textiles and textile products	10,190,513	336,592	198,435	10,368,559	318,880	201,813
Medical apparel	475,512	223,342	157,601	456,032	196,442	146,675
Men's and boys' suits and sports coats	850,473	146,899	76,715	924,183	161,855	85,856
Men's and boys' coats and jackets	1,692,303	75,786	44,226	1,783,145	77,763	44,667
Men's and boys' trousers	3,755,379	1,700,119	1,022,948	4,082,582	1,834,041	1,088,688
Women's and girls' trousers	3,670,148	929,616	544,827	3,948,005	1,198,421	721,107
Shirts and blouses	11,986,425	1,692,681	1,095,159	12,376,939	2,057,892	1,428,466
Women's and girls' suits, skirts and coats	3,547,993	600,374	279,104	3,857,068	721,348	333,636
Women's and girls' dresses	1,442,954	181,836	75,730	1,573,759	215,351	90,210
Robes, nightwear, and underwear	2,672,815	1,104,736	726,623	2,947,087	1,291,082	859,377
Hosiery	362,928	163,666	153,279	404,282	165,279	151,802
Foundation garments	926,720	685,945	463,852	864,383	607,628	410,783
Gloves including gloves for sports	1,733,310	51,939	28,838	1,893,499	47,849	32,369
Headwear	842,213	40,626	22,420	883,070	39,438	24,755
Other wearing apparel and accessories	5,924,113	384,186	230,982	5,905,356	426,803	254,408
Footwear and parts	12,095,267	1,397,721	158,191	12,708,385	1,678,736	191,716
Total	62,169,069	9,716,063	5,278,930	64,976,333	11,038,807	6,066,327
Minerals and metals:						
Steel mill products	11,785,730	236,522	176,568	12,755,527	260,219	188,781
Copper and related products	3,401,325	78,064	63,241	3,471,892	90,176	75,357
Aluminum mill products	2,048,034	14,617	9,738	1,737,499	19,336	11,894
Builders' hardware	762,571	96,896	51,044	865,975	119,942	61,687
Other metal products	45,025,967	576,302	251,071	47,359,971	706,060	318,977
Total	63,023,627	1,002,402	551,663	66,190,864	1,195,733	656,696
Miscellaneous manufacturers:						
Luggage, handbags, and flat goods	3,332,520	81,133	45,293	3,511,861	122,234	65,986
Jewelry	4,135,631	92,013	83,608	4,251,413	72,272	64,959
Motor vehicle and other furniture	8,423,237	604,115	112,567	9,497,327	734,323	115,279
Lamps and lighting fixtures	2,198,137	93,921	59,401	2,422,026	110,518	76,092
Other miscellaneous manufactured articles	21,277,482	386,473	94,991	22,831,912	383,190	112,255
Total	39,367,007	1,257,655	395,860	42,514,539	1,422,538	434,572
Machinery and equipment:						
Air conditioning equipment	4,129,220	293,680	140,329	4,576,021	414,210	179,092
Commercial machinery	1,191,025	55,527	20,064	1,223,091	53,746	20,729
Household appliances, including heating and drying equipment	4,073,901	433,448	206,527	4,261,106	455,846	217,648
Centrifuges, filtering and purifying equipment, and pumps for liquids	3,177,276	327,620	212,760	3,414,101	260,580	172,098

See note(s) at end of table.

Table B-3--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1995			1996		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Machinery and equipment--Continued						
Semiconductor equipment, robots, and other equipment	2,848,210	20,367	4,689	3,056,681	8,373	2,034
Taps, cocks, valves, and similar devices	2,931,255	386,309	260,472	3,127,789	406,872	277,048
Electric motors, generators and related equipment	3,879,726	780,214	474,953	3,875,491	859,374	522,087
Electrical transformers, static converters, and inductors	3,537,228	590,903	233,561	3,631,103	603,013	288,330
Powered handtools and parts thereof	1,142,444	135,973	50,436	1,291,244	205,270	69,669
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	1,097,119	188,194	88,791	1,153,410	153,020	80,033
Wiring harnesses for motor vehicles and other insulated electrical conduits	5,398,336	3,079,857	1,842,862	5,934,544	3,332,141	2,038,045
Miscellaneous machinery and equipment	27,480,211	565,059	142,613	28,439,752	606,550	171,710
Total	60,885,951	6,857,152	3,678,056	63,984,334	7,358,993	4,038,523
Transportation equipment:						
Aircraft engines and gas turbines	5,285,140	295,031	78,105	6,241,224	281,525	72,819
Motors and engines, except internal combustion, aircraft, or electric	474,310	1,250	926	510,749	1,512	948
Internal combustion piston engines, other than for aircraft	8,507,612	857,193	271,173	9,533,333	316,765	71,922
Construction and mining equipment	3,812,100	498,967	98,434	3,928,041	379,556	69,799
Forklift trucks and similar industrial vehicles	1,136,099	9,254	3,300	1,007,391	4,766	1,580
Ball and rollers bearings	1,520,314	16,157	2,437	1,525,993	13,810	1,824
Certain motor-vehicle parts	16,297,871	1,791,458	822,210	16,866,970	1,861,134	902,860
Primary cells and batteries, and electric storage batteries	1,636,963	230,107	83,545	1,709,778	230,915	83,348
Ignition starting, lighting, and other electrical equipment	1,832,824	184,406	107,985	2,032,462	331,830	162,101
Rail locomotive and rolling stock	1,291,549	258,216	87,088	1,312,004	347,833	115,660
Automobiles, trucks, buses, and bodies and chassis of the foregoing	84,216,729	18,571,228	2,032,052	87,115,738	23,208,851	2,633,047
Aircraft, spacecraft, and related equipment, except engines	6,135,254	75,289	23,285	7,352,988	26,937	17,010
Ships, tugs, pleasure boats, and similar vessels	919,399	87,410	16,447	1,130,263	153,530	23,853
Miscellaneous vehicles and transportation-related equipment	1,509,815	199,770	107,838	1,417,974	134,253	56,067
Motorcycles, mopeds, and parts	1,161,530	0	0	1,137,427	0	0
Total	135,737,507	23,075,736	3,734,822	142,822,335	27,293,217	4,212,839
Electronic products:						
Office machines	6,365,708	52,537	12,542	6,295,635	48,817	25,013
Telephone and telegraph apparatus	7,742,435	149,958	74,280	8,201,828	126,399	56,222
Optical fibers, optical fiber bundles and cables	154,129	44,842	28,555	215,842	87,065	58,321
Microphones, loudspeakers, audio amplifiers, and combinations thereof	2,000,815	218,701	69,010	2,108,045	232,479	79,208

See note(s) at end of table.

Table B-3--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1995			1996		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Electronic products--Continued						
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	6,732,859	124,736	23,730	5,872,788	117,513	15,782
Unrecorded magnetic tapes, discs, and other media	1,936,432	39,742	15,656	2,071,500	52,635	18,975
Records, tapes, compact discs, computer software, and other recorded media	916,374	384	181	994,102	487	351
Radio navigational aid, radar, and remote control apparatus	522,085	20,050	10,506	594,441	18,865	6,437
Radio transmission and reception apparatus, and combinations thereof	8,528,431	686,685	157,075	8,070,543	779,697	120,500
Television receivers, video monitors, and combinations including television receivers	4,539,980	2,265,254	756,263	4,498,315	2,426,818	965,511
Television picture tubes and other cathode-ray tubes	1,115,976	200,476	63,071	987,288	171,912	53,300
Television apparatus (except receivers and monitors), including cameras, camcorders, and cable apparatus	3,881,372	505,761	157,606	4,352,576	655,836	177,800
Electric sound and visual signaling apparatus	1,747,596	153,793	44,433	1,883,125	150,400	38,985
Special-purpose tubes	274,269	45,057	15,961	252,066	26,190	12,448
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	1,463,474	117,660	45,120	1,471,925	135,074	47,875
Electrical capacitors and resistors	1,879,243	404,166	270,017	1,691,406	303,173	200,770
Apparatus for making, breaking, protecting, or connecting electrical circuits	8,527,928	1,684,517	1,015,212	8,828,800	1,752,471	1,044,381
Semiconductor devices	39,167,784	8,613,036	4,301,684	36,771,266	8,164,008	4,086,895
Computer hardware	56,308,251	1,372,105	404,800	61,457,046	1,296,559	317,787
Photographic cameras and equipment	2,048,140	34,474	9,219	2,198,345	26,575	7,283
Photographic supplies	1,753,713	70,767	35,242	1,701,951	73,618	34,179
Exposed photographic plates, film, and paper	124,622	3	2	149,871	0	0
Medical goods	4,951,441	828,756	427,901	5,367,566	994,361	543,463
Optical goods	2,819,967	7,953	5,121	3,114,226	57,224	22,675
Surveying and navigational instruments	555,889	7,537	4,383	571,014	18,942	9,480
Balances of a sensitivity of 5 cgs or better	34,609	0	0	36,268	35	26
Drawing and mathematical calculating and measuring instruments	401,166	167,246	19,554	384,898	141,177	11,181
Watches	2,242,546	61,581	7,721	2,267,648	60,997	6,215
Clocks and timing devices	430,005	21,634	12,429	446,985	24,723	16,468
Measuring, testing, controlling and analyzing instruments	6,440,335	712,367	282,898	6,817,098	811,467	352,286
Total	175,607,576	18,611,779	8,270,172	179,674,406	18,755,514	8,329,816
Special provisions	23,120,192	285	115	25,946,440	283	113
Grand total	739,660,419	60,880,340	22,110,015	790,469,714	67,514,482	23,964,813

See note(s) at end of table.

Table B-3--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1997			1998		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Agricultural products	45,839,326	6,045	1,993	47,326,313	3,587	1,159
Forest products	30,456,362	140,871	81,556	31,998,229	130,676	74,998
Chemicals, coal, petroleum, natural gas, and related products:						
Fabricated plastic and rubber products	14,558,153	184,606	99,140	16,017,547	135,802	79,451
Other energy and chemical products	125,523,349	156,630	73,494	110,952,553	139,013	64,162
Total	140,081,502	341,237	172,634	126,970,100	274,814	143,613
Textiles, apparel, and footwear:						
Textiles and textile products	12,034,571	313,625	191,502	12,917,265	367,665	201,151
Medical apparel	548,181	190,212	144,149	598,075	210,950	157,867
Men's and boys' suits and sports coats	1,053,958	226,051	125,925	1,156,238	248,264	127,007
Men's and boys' coats and jackets	2,229,545	106,776	58,034	2,162,857	122,847	67,771
Men's and boys' trousers	4,932,815	2,326,292	1,320,939	5,704,551	2,513,376	1,399,633
Women's and girls' trousers	5,096,730	1,686,687	989,884	5,886,920	2,009,912	1,146,336
Shirts and blouses	14,415,815	2,897,418	2,055,796	16,436,040	3,422,385	2,368,814
Women's and girls' suits, skirts and coats	4,144,023	780,628	348,625	4,284,729	700,002	312,219
Women's and girls' dresses	1,635,964	244,066	96,988	1,686,250	261,426	103,299
Robes, nightwear, and underwear	3,596,847	1,704,776	1,149,299	4,117,478	1,940,921	1,292,569
Hosiery	566,042	265,291	242,100	685,432	338,752	303,484
Foundation garments	968,474	633,188	433,847	1,114,115	655,142	445,793
Gloves including gloves for sports	2,003,935	50,588	33,247	2,155,982	47,456	31,646
Headwear	866,639	32,970	21,324	959,173	30,369	19,764
Other wearing apparel and accessories	6,700,939	536,412	334,769	7,223,939	648,451	405,893
Footwear and parts	13,951,034	1,835,513	224,855	13,879,187	1,598,482	219,325
Total	74,745,512	13,830,494	7,771,283	80,968,232	15,116,398	8,602,571
Minerals and metals:						
Steel mill products	13,601,558	216,257	166,010	16,434,086	62,724	45,730
Copper and related products	3,743,322	77,139	54,824	3,358,825	16,149	7,336
Aluminum mill products	2,008,697	26,866	15,832	2,180,577	22,830	14,961
Builders' hardware	907,567	140,637	68,423	1,045,181	189,932	94,606
Other metal products	52,947,905	511,028	251,589	58,038,952	435,558	239,058
Total	73,209,049	971,926	556,678	81,057,621	727,192	401,690
Miscellaneous manufacturers:						
Luggage, handbags, and flat goods	3,778,972	142,533	76,204	3,911,635	173,566	82,036
Jewelry	4,484,937	65,772	56,198	5,084,543	88,822	68,150
Motor vehicle and other furniture	11,223,773	658,459	105,489	13,427,746	714,209	115,890
Lamps and lighting fixtures	2,729,463	124,427	85,742	3,167,249	134,221	94,831
Other miscellaneous manufactured articles	26,737,159	343,053	100,571	29,028,958	315,322	99,858
Total	48,954,305	1,334,244	424,204	54,620,131	1,426,139	460,765
Machinery and equipment:						
Air conditioning equipment	4,432,627	437,046	255,151	4,945,197	277,829	187,389
Commercial machinery	1,328,917	59,624	21,357	1,412,810	49,374	19,849
Household appliances, including heating and drying equipment	4,592,810	520,848	226,887	5,194,285	365,603	179,853
Centrifuges, filtering and purifying equipment, and pumps for liquids	3,493,529	255,291	118,016	3,771,985	128,044	71,063

See note(s) at end of table.

Table B-3--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1997			1998		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
<i>Machinery and equipment--Continued</i>						
Semiconductor equipment, robots, and other equipment	3,721,251	15,984	901	4,133,555	17,295	4,483
Taps, cocks, valves, and similar devices	3,566,259	610,728	426,398	3,974,338	606,300	430,570
Electric motors, generators and related equipment	4,179,430	956,326	578,707	4,748,900	1,129,397	674,653
Electrical transformers, static converters, and inductors	4,290,176	771,885	382,195	4,481,063	817,201	419,334
Powered handtools and parts thereof	1,500,014	245,995	92,937	1,616,310	262,299	108,491
Flashlights and other similar electric lights, light bulbs and fluorescent tubes; arc lights	1,214,573	168,049	99,235	1,286,752	155,307	93,478
Wiring harnesses for motor vehicles and other insulated electrical conduits	6,818,674	2,684,279	1,637,673	7,221,318	2,998,813	1,667,592
Miscellaneous machinery and equipment	30,745,501	634,032	188,714	32,227,986	680,620	187,132
Total	69,883,762	7,360,087	4,028,170	75,014,497	7,488,083	4,043,886
<i>Transportation equipment:</i>						
Aircraft engines and gas turbines	8,380,319	239,626	65,197	10,403,722	59,080	45,364
Motors and engines, except internal combustion, aircraft, or electric	567,229	6,752	4,405	620,535	11,162	8,214
Internal combustion piston engines, other than for aircraft	9,986,736	235,196	59,053	11,477,855	170,186	52,546
Construction and mining equipment	4,883,960	463,631	79,345	6,188,014	457,781	74,331
Forklift trucks and similar industrial vehicles	1,163,547	2,971	765	1,455,796	165	52
Ball and rollers bearings	1,615,169	24,063	10,600	1,719,323	33,186	16,199
Certain motor-vehicle parts	17,804,442	1,626,935	967,330	18,766,540	1,612,101	959,836
Primary cells and batteries, and electric storage batteries	1,896,497	268,642	106,980	1,935,581	337,599	85,766
Ignition starting, lighting, and other electrical equipment	2,169,676	394,674	193,867	2,362,641	374,929	214,416
Rail locomotive and rolling stock	1,371,944	331,065	108,447	2,155,996	94,401	20,718
Automobiles, trucks, buses, and bodies and chassis of the foregoing	92,987,590	31,053,424	2,551,490	99,828,430	25,541,636	637,117
Aircraft, spacecraft, and related equipment, except engines	9,459,223	37,299	28,333	12,748,444	33,567	25,365
Ships, tugs, pleasure boats, and similar vessels	923,763	111,672	23,903	1,090,060	134,627	28,571
Miscellaneous vehicles and transportation-related equipment	1,521,854	148,502	74,668	1,666,349	156,563	77,846
Motorcycles, mopeds, and parts	1,104,124	21	3	1,292,919	286	219
Total	155,836,073	34,944,473	4,274,385	173,712,204	29,017,269	2,246,562
<i>Electronic products:</i>						
Office machines	6,687,721	43,105	24,390	6,207,867	56,468	24,740
Telephone and telegraph apparatus	9,261,095	161,850	92,446	10,488,281	217,712	120,140
Optical fibers, optical fiber bundles and cables	272,077	94,697	54,493	398,479	13,878	9,321
Microphones, loudspeakers, audio amplifiers, and combinations thereof	2,168,286	309,012	92,227	2,312,347	276,180	81,955

Electronic products--Continued

See note(s) at end of table.

Table B-3--Continued

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1995-98

(Thousand dollars)

Commodity group	1997			1998		
	Total imports	Imports under HTS PSP	U.S. content	Total imports	Imports under HTS PSP	U.S. content
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	6,128,440	154,776	18,228	6,425,914	179,800	29,266
Unrecorded magnetic tapes, discs, and other media	2,090,358	27,129	7,830	2,103,416	31,009	10,422
Records, tapes, compact discs, computer software, and other recorded media	981,173	605	182	1,134,649	320	100
Radio navigational aid, radar, and remote control apparatus	690,906	59,360	19,788	723,704	69,334	23,918
Radio transmission and reception apparatus, and combinations thereof	9,060,482	1,203,584	142,621	10,248,608	1,035,941	137,583
Television receivers, video monitors, and combinations including television receivers	4,403,269	2,212,945	996,399	5,319,335	2,372,993	1,153,318
Television picture tubes and other cathode-ray tubes	876,248	134,725	36,027	798,001	54,287	17,269
Television apparatus (except receivers and monitors), including cameras, camcorders, and cable apparatus	4,039,041	458,610	100,517	5,110,210	676,772	75,035
Electric sound and visual signaling apparatus	2,053,313	171,857	47,413	2,100,140	210,531	45,182
Special-purpose tubes	247,113	22,323	11,047	200,435	14,785	7,102
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	1,597,375	113,651	45,328	1,778,527	131,693	44,892
Electrical capacitors and resistors	1,949,779	345,701	231,261	2,000,757	343,075	236,185
Apparatus for making, breaking, protecting, or connecting electrical circuits	9,965,419	2,000,735	1,139,377	10,120,253	2,057,094	1,130,954
Semiconductor devices	36,878,268	8,537,335	4,557,918	33,696,142	8,408,106	4,534,253
Computer hardware	69,953,180	1,635,224	405,285	72,157,438	1,244,094	459,043
Photographic cameras and equipment	2,333,940	37,132	10,553	2,549,116	22,793	6,597
Photographic supplies	1,766,499	83,554	38,274	1,709,363	76,454	35,897
Exposed photographic plates, film, and paper	147,082	0	0	151,571	0	0
Medical goods	5,894,587	1,095,110	595,512	6,934,064	1,045,096	488,151
Optical goods	3,397,099	72,894	42,507	3,682,909	52,319	19,509
Surveying and navigational instruments	757,066	45,172	22,027	826,475	50,798	22,086
Balances of a sensitivity of 5 cgs or better	40,809	16	11	38,316	0	0
Drawing and mathematical calculating and measuring instruments	428,473	134,571	11,315	427,178	122,094	6,095
Watches	2,310,934	281	123	2,548,228	56,764	7,350
Clocks and timing devices	447,244	30,898	22,012	551,766	80,545	51,444
Measuring, testing, controlling and analyzing instruments	7,719,217	1,045,814	485,459	8,323,407	970,427	447,539
Total	194,546,495	20,232,669	9,250,572	201,066,897	19,871,361	9,225,347
Special provisions	28,873,960	4,659	3,564	34,912,780	12,041	12,019
Grand total	862,426,346	79,166,706	26,565,040	907,647,006	74,067,561	25,212,611

Note:--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-4

U.S. imports for consumption under the production-sharing provisions (PSP) of HTS Chapter 98, by principal sources, 1998

Source	Total value		Duty-free value	
	Value	Percentage of total	Value	Percentage of total
	<i>Million dollars</i>		<i>Million dollars</i>	
Grand total	74,068	100.0	25,213	100.0
Top 10 sources	62,319	84.1	20,910	82.9
Mexico	27,162	36.7	14,484	57.4
Japan	12,363	16.7	506	2.0
Germany	9,158	12.4	114	0.5
Dominican Rep	2,806	3.8	1,766	7.0
Philippines	2,254	3.0	1,129	4.5
Sweden	2,020	2.7	23	0.1
Malaysia	1,831	2.5	915	3.6
Honduras	1,604	2.2	1,142	4.5
Korea	1,601	2.2	786	3.1
Belgium	1,520	2.1	45	0.2
All other		11,748	15.9	4,303
	17.1			

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-5

U.S. imports for consumption from Mexico under NAFTA and the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Entered under					Total NAFTA	Total HTS PSP	U.S. content under HTS PSP
	Total	NAFTA and HTS PSP	NAFTA only	HTS PSP only	All other			
Agricultural products	5,395,630	2,461	3,940,179	851	1,452,140	3,942,640	3,311	980
Forest products	1,002,679	102,609	567,162	15,555	317,353	669,772	118,164	70,287
Chemicals, coal, petroleum, natural gas, and related products:								
Fabricated plastic and rubber products	1,064,847	103,704	853,640	16,411	91,093	957,344	120,115	71,051
Other energy and chemical products	6,604,674	11,066	4,713,770	17,965	1,861,874	4,724,835	29,031	12,681
Total	7,669,522	114,770	5,567,409	34,376	1,952,967	5,682,179	149,146	83,732
Textiles, apparel, and footwear:								
Textiles and textile products	1,242,938	131,936	951,650	130,194	29,159	1,083,586	262,130	163,274
Medical apparel	239,845	18,234	46,692	174,638	281	64,926	192,872	142,342
Men's and boys' suits and sports coats	113,789	27,776	78,660	7,175	179	106,436	34,950	20,688
Men's and boys' coats and jackets	73,581	11,570	15,053	46,167	791	26,623	57,737	39,209
Men's and boys' trousers	1,506,783	119,439	291,986	1,094,687	671	411,425	1,214,126	694,045
Women's and girls' trousers	1,343,794	249,298	133,656	959,232	1,609	382,953	1,208,530	742,567
Shirts and blouses	1,793,877	109,606	331,455	1,343,505	9,310	441,061	1,453,111	1,087,643
Women's and girls' suits, skirts and coats	204,987	49,002	17,448	134,870	3,666	66,450	183,872	93,704
Women's and girls' dresses	146,748	40,578	13,267	88,719	4,183	53,846	129,298	55,066
Robes, nightwear, and underwear	509,643	75,872	124,231	298,279	11,261	200,103	374,151	249,458
Hosiery	180,132	891	66,948	112,228	65	67,839	113,119	96,515
Foundation garments	260,562	83,813	99,006	76,231	1,513	182,819	160,043	112,930
Gloves including gloves for sports	51,473	7,796	35,116	8,120	442	42,911	15,915	12,721
Headwear	49,501	15,278	25,113	8,686	423	40,391	23,965	15,424
Other wearing apparel and accessories	350,868	63,947	120,820	154,349	11,752	184,767	218,296	148,484
Footwear and parts	349,222	51,030	254,192	34,007	9,993	305,222	85,037	67,929
Total	8,417,742	1,056,065	2,605,293	4,671,086	85,298	3,661,358	5,727,151	3,741,998
Minerals and metals:								
Steel mill products	1,143,400	38,759	971,207	3	133,432	1,009,966	38,762	27,420
Copper and related products	625,744	230	562,162	2,826	60,526	562,393	3,056	965
Aluminum mill products	31,390	1,846	29,412	0	133	31,258	1,846	1,590
Builders' hardware	245,544	187,999	49,404	1,598	6,544	237,403	189,596	94,415

See note(s) at end of table.

Table B-5--Continued

U.S. imports for consumption from Mexico under NAFTA and the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Entered under					Total NAFTA	Total HTS PSP	U.S. content under HTS PSP
	Total	NAFTA and HTS PSP	NAFTA only	HTS PSP only	All other			
Minerals and metals--Continued								
Other metal products	3,746,515	334,820	2,339,308	13,712	1,058,675	2,674,128	348,532	194,987
Total	5,792,594	563,654	3,951,493	18,139	1,259,308	4,515,146	581,793	319,377
Miscellaneous manufacturers:								
Luggage, handbags, and flat goods	153,574	14,359	35,242	95,133	8,840	49,601	109,492	69,549
Jewelry	188,686	37,666	148,357	16	2,648	186,023	37,682	32,271
Motor vehicle and other furniture	2,322,995	705,516	1,568,548	6,938	41,993	2,274,064	712,454	115,610
Lamps and lighting fixtures	374,265	127,024	241,095	3,221	2,925	368,119	130,245	94,470
Other miscellaneous manufactured articles	1,220,313	128,861	456,394	30,841	604,217	585,255	159,702	69,946
Total	4,259,832	1,013,426	2,449,635	136,148	660,622	3,463,062	1,149,575	381,847
Machinery and equipment:								
Air conditioning equipment	879,346	221,966	525,662	27,544	104,173	747,628	249,511	180,221
Commercial machinery	208,625	36,852	164,739	1,651	5,382	201,591	38,504	17,385
Household appliances, including heating and drying equipment	981,056	273,385	622,778	21,162	63,731	896,164	294,547	166,879
Centrifuges, filtering and purifying equipment, and pumps for liquids	416,303	71,602	303,341	6,724	34,635	374,943	78,327	61,445
Semiconductor equipment, robots, and other equipment	10,880	115	7,224	1,303	2,238	7,339	1,418	547
Taps, cocks, valves, and similar devices	910,175	545,268	282,229	23,928	58,750	827,497	569,196	413,606
Electric motors, generators and related equipment	1,550,760	1,028,980	382,907	44,485	94,389	1,411,887	1,073,465	663,921
Electrical transformers, static converters, and inductors	1,539,971	556,843	699,620	177,282	106,226	1,256,463	734,125	391,857
Powered handtools and parts thereof	260,812	161,066	47,098	3,374	49,274	208,164	164,440	99,733
Flashlights and other similar electric lights, light bulbs and fluorescent tubes; arc lights	218,103	116,029	65,693	22,760	13,621	181,722	138,789	87,920
Wiring harnesses for motor vehicles and other insulated electrical conduits	4,761,216	2,614,432	1,582,087	206,186	358,510	4,196,520	2,820,618	1,615,691
Miscellaneous machinery and equipment	789,059	238,433	338,798	95,140	116,688	577,231	333,573	129,572
Total	12,526,307	5,864,972	5,022,177	631,540	1,007,618	10,887,149	6,496,513	3,828,776

See note(s) at end of table.

Table B-5--Continued

U.S. imports for consumption from Mexico under NAFTA and the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Entered under					Total NAFTA	Total HTS PSP	U.S. content under HTS PSP
	Total	NAFTA and HTS PSP	NAFTA only	HTS PSP only	All other			
Transportation equipment:								
Aircraft engines and gas turbines	81,725	42,092	1,517	6,719	31,398	43,608	48,811	38,702
Motors and engines, except internal combustion, aircraft, or electric	18,307	10,488	7,573	0	246	18,061	10,488	7,683
Internal combustion piston engines, other than for aircraft	2,271,712	85,193	1,971,895	3,878	210,746	2,057,087	89,071	34,268
Transportation equipment--Continued								
Construction and mining equipment	354,812	0	263,258	0	91,553	263,258	0	0
Forklift trucks and similar industrial vehicles	30,299	0	0	0	30,299	0	0	0
Ball and rollers bearings	57,931	27,093	28,916	224	1,698	56,010	27,317	15,385
Certain motor-vehicle parts	3,184,094	1,260,232	1,672,734	78,267	172,861	2,932,966	1,338,499	924,286
Primary cells and batteries, and electric storage batteries	376,532	130,540	179,929	41,327	24,736	310,469	171,867	69,201
Ignition starting, lighting, and other electrical equipment	596,652	262,522	157,316	85,843	90,972	419,837	348,365	207,215
Rail locomotive and rolling stock	314,541	11	243,696	0	70,835	243,706	11	10
Automobiles, trucks, buses, and bodies and chassis of the foregoing	13,224,569	444,877	12,750,878	1,496	27,318	13,195,756	446,373	249,080
Aircraft, spacecraft, and related equipment, except engines	48,754	0	613	24,841	23,299	613	24,841	18,001
Ships, tugs, pleasure boats, and similar vessels	4,976	11	4,516	0	450	4,527	11	10
Miscellaneous vehicles and transportation-related equipment	206,494	138,677	38,808	75	28,935	177,485	138,751	71,365
Motorcycles, mopeds, and parts	10,270	16	3,581	0	6,673	3,597	16	8
Total	20,781,669	2,401,750	17,325,230	242,670	812,018	19,726,981	2,644,420	1,635,214
Electronic products:								
Office machines	251,936	46,060	123,892	2,794	79,189	169,952	48,854	23,280
Telephone and telegraph apparatus	1,064,410	173,421	598,701	31,207	261,081	772,122	204,628	112,038
Optical fibers, optical fiber bundles and cables 2,805		23,530	3,666	18,027	953	885	21,693	4,619
Microphones, loudspeakers, audio amplifiers, and combinations thereof	467,522	168,815	153,655	104,996	40,056	322,470	273,811	80,754
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	576,528	114,592	390,866	65,201	5,869	505,458	179,792	29,259

See note(s) at end of table.

Table B-5--Continued

U.S. imports for consumption from Mexico under NAFTA and the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Entered under					Total NAFTA	Total HTS PSP	U.S. content under HTS PSP
	Total	NAFTA and HTS PSP	NAFTA only	HTS PSP only	All other			
<i>Electronic products--Continued</i>								
Unrecorded magnetic tapes, discs, and other media	197,974	2,145	104,139	28,865	62,825	106,284	31,009	10,422
Records, tapes, compact discs, computer software, and other recorded media	41,218	263	33,988	0	6,967	34,252	263	76
Radio navigational aid, radar, and remote control apparatus	78,902	65,722	10,068	1,672	1,441	75,789	67,393	23,050
Radio transmission and reception apparatus, and combinations thereof	2,002,745	870,583	769,862	150,917	211,383	1,640,445	1,021,500	131,483
Television receivers, video monitors, and combinations including television receivers	4,078,211	2,308,125	1,504,481	62,940	202,664	3,812,606	2,371,066	1,152,362
Television picture tubes and other cathode-ray tubes	257,922	20,109	175,310	25,158	37,344	195,419	45,267	16,116
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	1,258,202	236,386	834,504	10,335	176,977	1,070,890	246,721	60,723
Electric sound and visual signaling apparatus	247,681	172,314	54,495	17,242	3,630	226,809	189,556	37,778
Special-purpose tubes	14,890	14,328	0	457	105	14,328	14,785	7,102
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	174,525	103,340	53,914	10,237	7,034	157,254	113,577	40,038
Electrical capacitors and resistors	477,821	329,345	140,016	1,256	7,204	469,362	330,601	228,670
Apparatus for making, breaking, protecting, or connecting electrical circuits	2,368,731	1,536,683	525,920	194,122	112,006	2,062,603	1,730,805	964,810
Semiconductor devices	883,457	6,193	283	659,822	217,159	6,476	666,015	274,846
Computer hardware	5,447,704	226,058	1,315,894	883,375	3,022,378	1,541,952	1,109,433	410,218
Photographic cameras and equipment	162,346	0	133,776	507	28,064	133,776	507	331
Photographic supplies	140,439	0	140,014	0	426	140,014	0	0
Exposed photographic plates, film, and paper	508	0	0	0	508	0	0	0
Medical goods	850,658	585,157	114,482	42,017	109,002	699,639	627,174	319,775
Optical goods	69,901	2,044	65,433	1,444	980	67,477	3,488	1,717
Surveying and navigational instruments	67,350	41,658	626	1,031	24,036	42,283	42,688	18,542
Balances of a sensitivity of 5 cgs or better	0	0	0	0	0	0	0	0
Drawing and mathematical calculating and measuring instruments	2,923	0	2,549	0	374	2,549	0	0
Watches	1,146	0	1,069	0	77	1,069	0	0

See note(s) at end of table.

Table B-5--Continued

U.S. imports for consumption from Mexico under NAFTA and the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Entered under					Total NAFTA	Total HTS PSP	U.S. content under HTS PSP
	Total	NAFTA and HTS PSP	NAFTA only	HTS PSP only	All other			
<i>Electronic products--Continued</i>								
Clocks and timing devices	81,333	79,203	1,665	318	147	80,868	79,521	51,268
Measuring, testing, controlling and analyzing instruments	1,964,797	604,828	607,208	284,140	468,621	1,212,036	888,968	424,077
Total	23,255,310	7,711,039	7,874,836	2,581,002	5,088,432	15,585,875	10,292,042	4,421,541
Special provisions	3,916,073	0	191,529	31	3,724,513	191,529	31	19
Grand total	93,017,358	18,830,747	49,494,943	8,331,398	16,360,269	68,325,690	27,162,145	14,483,769

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-6

U.S. imports for consumption from Japan, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	444,640	0	0
Forest products	514,594	0	0
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	2,200,161	492	124
Other energy and chemical products	6,330,343	146	116
Total	8,530,504	638	240
Textiles, apparel, and footwear:			
Textiles and textile products	510,346	151	102
Medical apparel	77,688	26	20
Men's and boys' suits and sports coats	787	0	0
Men's and boys' coats and jackets	998	0	0
Men's and boys' trousers	820	0	0
Women's and girls' trousers	9,471	0	0
Shirts and blouses	5,160	0	0
Women's and girls' suits, skirts and coats	13,414	0	0
Women's and girls' dresses	1,775	0	0
Robes, nightwear, and underwear	1,156	0	0
Hosiery	5,956	0	0
Foundation garments	63	0	0
Gloves including gloves for sports	6,680	0	0
Headwear	22,648	0	0
Other wearing apparel and accessories	20,153	0	0
Footwear and parts	1,877	53	3
Total	678,990	230	126
Minerals and metals:			
Steel mill products	2,914,034	0	0
Copper and related products	195,103	11,159	6,112
Aluminum mill products	122,967	16,703	10,360
Builders' hardware	40,370	0	0
Other metal products	3,389,876	4,650	4,362
Total	6,662,349	32,512	20,833
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	5,377	0	0
Jewelry	24,169	0	0
Motor vehicle and other furniture	148,168	0	0
Lamps and lighting fixtures	39,018	0	0
Other miscellaneous manufactured articles	3,814,233	5,330	1,271
Total	4,030,965	5,330	1,271
Machinery and equipment:			
Air conditioning equipment	760,727	0	0
Commercial machinery	121,788	0	0
Household appliances, including heating and drying equipment	282,473	58	14
Centrifuges, filtering and purifying equipment, and pumps for liquids	505,770	0	0
Semiconductor equipment, robots, and other equipment	2,032,232	418	64
Taps, cocks, valves, and similar devices	573,435	4	3
Electric motors, generators, and related equipment	767,795	1,046	557
Electrical transformers, static converters, and inductors	421,117	60	10
Powered handtools and parts thereof	306,526	7	(¹)
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	184,877	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	202,832	16	(¹)
Miscellaneous machinery and equipment	7,088,307	54,078	6,050
Total	13,247,880	55,686	6,699

See note(s) at end of table.

Table B-6--Continued

U.S. imports for consumption from Japan, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	423,348	2,857	2,000
Motors and engines, except internal combustion, aircraft, or electric	141,417	0	0
Internal combustion piston engines, other than for aircraft	3,274,597	60,617	6,019
Construction and mining equipment	1,660,439	103,159	21,375
Forklift trucks and similar industrial vehicles	276,276	0	0
Ball and rollers bearings	573,462	0	0
Certain motor-vehicle parts	3,491,237	120,893	1,015
Primary cells and batteries, and electric storage batteries	846,474	148,054	10,278
Ignition starting, lighting, and other electrical equipment	694,967	0	0
Rail locomotive and rolling stock	100,711	35,884	8,434
Automobiles, trucks, buses, and bodies and chassis of the foregoing	28,863,702	11,464,990	201,194
Aircraft, spacecraft, and related equipment, except engines	1,445,056	1,521	1,300
Ships, tugs, pleasure boats, and similar vessels	33,800	0	0
Miscellaneous vehicles and transportation-related equipment	473,397	310	1
Motorcycles, mopeds, and parts	993,409	0	0
Total	43,292,292	11,938,285	251,616
Electronic products:			
Office machines	2,686,017	0	0
Telephone and telegraph apparatus	1,735,996	1,935	262
Optical fibers, optical fiber bundles and cables	49,723	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	185,012	71	23
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	2,000,696	7	7
Unrecorded magnetic tapes, discs, and other media	996,754	0	0
Records, tapes, compact discs, computer software, and other recorded media	107,183	0	0
Radio navigational aid, radar, and remote control apparatus	94,583	81	73
Radio transmission and reception apparatus, and combinations thereof	1,167,310	379	22
Television receivers, video monitors, and combinations including television receivers	347,385	61	25
Television picture tubes and other cathode-ray tubes	365,971	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	2,485,282	2,678	464
Electric sound and visual signaling apparatus	491,770	0	0
Special-purpose tubes	49,107	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	327,476	9,524	635
Electrical capacitors and resistors	756,827	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	1,775,954	1,922	983
Semiconductor devices	6,163,100	286,202	217,507
Computer hardware	13,082,674	6,964	630
Photographic cameras and equipment	729,564	0	0
Photographic supplies	608,714	0	0
Exposed photographic plates, film, and paper	20,881	0	0
Medical goods	1,145,157	10,661	608
Optical goods	894,078	601	156
Surveying and navigational instruments	111,940	7,150	2,985
Balances of a sensitivity of 5 cgs or better	3,222	0	0
Drawing and mathematical calculating and measuring instruments	76,545	16	16
Watches	808,205	985	199
Clocks and timing devices	44,960	0	0
Measuring, testing, controlling and analyzing instruments	1,524,184	1,146	225
Total	40,836,268	330,384	224,820

See note(s) at end of table.

Table B-6--Continued

U.S. imports for consumption from Japan, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	3,074,867	0	0
Grand total	121,313,351	12,363,065	505,604

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-7

U.S. imports for consumption from Germany, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	825,818	0	0
Forest products	695,994	302	214
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	774,916	522	369
Other energy and chemical products	7,338,576	2,627	1,027
Total	8,113,492	3,150	1,396
Textiles, apparel, and footwear:			
Textiles and textile products	366,033	3	1
Medical apparel	11,828	0	0
Men's and boys' suits and sports coats	4,727	0	0
Men's and boys' coats and jackets	1,695	0	0
Men's and boys' trousers	908	0	0
Women's and girls' trousers	6,949	0	0
Shirts and blouses	12,415	0	0
Women's and girls' suits, skirts and coats	30,431	0	0
Women's and girls' dresses	5,138	0	0
Robes, nightwear, and underwear	938	0	0
Hosiery	5,393	0	0
Foundation garments	84	0	0
Gloves including gloves for sports	2,131	0	0
Headwear	3,457	0	0
Other wearing apparel and accessories	16,897	0	0
Footwear and parts	74,604	60	2
Total	543,628	63	4
Minerals and metals:			
Steel mill products	1,029,241	0	0
Copper and related products	160,550	0	0
Aluminum mill products	297,919	0	0
Builders' hardware	47,745	0	0
Other metal products	1,898,194	12,034	4,236
Total	3,433,649	12,034	4,236
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	9,764	0	0
Jewelry	40,983	11	4
Motor vehicle and other furniture	172,479	0	0
Lamps and lighting fixtures	52,346	0	0
Other miscellaneous manufactured articles	735,478	7	5
Total	1,011,049	18	9
Machinery and equipment:			
Air conditioning equipment	308,887	3,637	168
Commercial machinery	139,371	2	2
Household appliances, including heating and drying equipment	346,531	2,397	406
Centrifuges, filtering and purifying equipment, and pumps for liquids	750,051	1,096	61
Semiconductor equipment, robots, and other equipment	563,632	1,273	207
Taps, cocks, valves, and similar devices	404,544	4	1
Electric motors, generators and related equipment	349,315	5,680	200
Electrical transformers, static converters, and inductors	168,441	3	2
Powered handtools and parts thereof	153,656	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	92,550	20	(¹)
Wiring harnesses for motor vehicles and other insulated electrical conduits	86,927	96	3
Miscellaneous machinery and equipment	6,185,482	82,136	4,938
Total	9,549,387	96,344	5,988

See note(s) at end of table.

Table B-7--Continued

U.S. imports for consumption from Germany, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	984,475	0	0
Motors and engines, except internal combustion, aircraft, or electric	109,520	0	0
Internal combustion piston engines, other than for aircraft	829,378	3,704	2,142
Construction and mining equipment	548,762	0	0
Forklift trucks and similar industrial vehicles	88,833	0	0
Ball and rollers bearings	183,043	33	21
Certain motor-vehicle parts	886,733	25,397	1,008
Primary cells and batteries, and electric storage batteries	32,107	20	3
Ignition starting, lighting, and other electrical equipment	158,595	865	398
Rail locomotive and rolling stock	35,357	1	(¹)
Automobiles, trucks, buses, and bodies and chassis of the foregoing	12,484,167	8,983,641	85,593
Aircraft, spacecraft, and related equipment, except engines	946,891	0	0
Ships, tugs, pleasure boats, and similar vessels	58,081	225	25
Miscellaneous vehicles and transportation-related equipment	143,018	0	0
Motorcycles, mopeds, and parts	64,622	0	0
Total	17,553,582	9,013,886	89,191
Electronic products:			
Office machines	110,739	0	0
Telephone and telegraph apparatus	117,802	0	0
Optical fibers, optical fiber bundles and cables	13,494	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	42,168	310	293
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	25,688	0	0
Unrecorded magnetic tapes, discs, and other media	204,575	0	0
Records, tapes, compact discs, computer software, and other recorded media	83,495	0	0
Radio navigational aid, radar, and remote control apparatus	11,647	0	0
Radio transmission and reception apparatus, and combinations thereof	62,102	0	0
Television receivers, video monitors, and combinations including television receivers	9,104	0	0
Television picture tubes and other cathode-ray tubes	15,290	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	12,434	0	0
Electric sound and visual signaling apparatus	25,311	12	(¹)
Special-purpose tubes	37,284	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	99,538	24	20
Electrical capacitors and resistors	43,134	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	731,776	4,055	366
Semiconductor devices	572,366	23,090	11,051
Computer hardware	653,846	572	363
Photographic cameras and equipment	79,680	3	2
Photographic supplies	194,931	0	0
Exposed photographic plates, film, and paper	2,097	0	0
Medical goods	1,182,372	226	158
Optical goods	290,395	75	49
Surveying and navigational instruments	45,003	0	0
Balances of a sensitivity of 5 cgs or better	7,436	0	0
Drawing and mathematical calculating and measuring instruments	13,085	0	0
Watches	8,164	0	0
Clocks and timing devices	47,347	45	2
Measuring, testing, controlling and analyzing instruments	1,033,344	4,057	505
Total	5,775,647	32,468	12,809

See note(s) at end of table.

Table B-7--Continued

U.S. imports for consumption from Germany, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	2,293,305	0	0
Grand total	49,795,551	9,158,266	113,847

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-8

U.S. imports for consumption from the Dominican Republic, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998
(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	605,204	0	0
Forest products	5,388	172	11
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	31,876	144	52
Other energy and chemical products	9,153	332	66
Total	41,029	476	118
Textiles, apparel, and footwear:			
Textiles and textile products	39,122	22,397	15,108
Medical apparel	9,586	16	2
Men's and boys' suits and sports coats	111,134	97,418	70,810
Men's and boys' coats and jackets	22,020	17,364	9,101
Men's and boys' trousers	663,418	644,160	349,721
Women's and girls' trousers	319,181	312,076	165,282
Shirts and blouses	343,681	266,306	200,621
Women's and girls' suits, skirts and coats	135,800	126,385	80,009
Women's and girls' dresses	11,963	8,494	4,515
Robes, nightwear, and underwear	373,013	365,863	245,809
Hosiery	40,227	40,227	33,645
Foundation garments	182,072	180,001	128,421
Gloves including gloves for sports	20	19	15
Headwear	46,345	2,713	1,932
Other wearing apparel and accessories	99,809	92,687	67,731
Footwear and parts	284,307	97,098	64,602
Total	2,681,699	2,273,225	1,437,323
Minerals and metals:			
Steel mill products	1,325	0	0
Copper and related products	2,954	0	0
Aluminum mill products	24	0	0
Builders' hardware	9,027	0	0
Other metal products	96,224	5,092	3,863
Total	109,554	5,092	3,863
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	34,080	10,465	2,054
Jewelry	160,278	28,156	23,420
Motor vehicle and other furniture	5,168	0	0
Lamps and lighting fixtures	14	0	0
Other miscellaneous manufactured articles	20,590	9,959	5,977
Total	220,130	48,580	31,452
Machinery and equipment:			
Air conditioning equipment	18	0	0
Commercial machinery	760	0	0
Household appliances, including heating and drying equipment	50	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	343	0	0
Semiconductor equipment, robots, and other equipment	13	8	1
Taps, cocks, valves, and similar devices	2	0	0
Electric motors, generators and related equipment	278	184	73
Electrical transformers, static converters, and inductors	26,050	23,812	15,552
Powered handtools and parts thereof	0	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	16	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	3,207	2,397	1,986
Miscellaneous machinery and equipment	999	0	0
Total	31,735	26,401	17,612

See note(s) at end of table.

Table B-8--Continued

U.S. imports for consumption from the Dominican Republic, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998
(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	0	0	0
Motors and engines, except internal combustion, aircraft, or electric	0	0	0
Internal combustion piston engines, other than for aircraft	12	0	0
Construction and mining equipment	22	0	0
Forklift trucks and similar industrial vehicles	0	0	0
Ball and rollers bearings	0	0	0
Certain motor-vehicle parts	292	0	0
Primary cells and batteries, and electric storage batteries	0	0	0
Ignition starting, lighting, and other electrical equipment	5,041	0	0
Rail locomotive and rolling stock	0	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	0	0	0
Aircraft, spacecraft, and related equipment, except engines	0	0	0
Ships, tugs, pleasure boats, and similar vessels	0	0	0
Miscellaneous vehicles and transportation-related equipment	4	0	0
Motorcycles, mopeds, and parts	0	0	0
Total	5,371	0	0
Electronic products:			
Office machines	28	0	0
Telephone and telegraph apparatus	4,661	0	0
Optical fibers, optical fiber bundles and cables	6,351	6,215	4,871
Microphones, loudspeakers, audio amplifiers, and combinations thereof	8	6	2
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	12	0	0
Unrecorded magnetic tapes, discs, and other media	2	0	0
Records, tapes, compact discs, computer software, and other recorded media	41	0	0
Radio navigational aid, radar, and remote control apparatus	14	0	0
Radio transmission and reception apparatus, and combinations thereof	10	2	(¹)
Television receivers, video monitors, and combinations including television receivers	7	0	0
Television picture tubes and other cathode-ray tubes	0	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	0	0	0
Electric sound and visual signaling apparatus	41,823	6,701	3,724
Special-purpose tubes	0	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	2,877	104	47
Electrical capacitors and resistors	6,643	338	239
Apparatus for making, breaking, protecting, or connecting electrical circuits	236,794	158,865	108,974
Semiconductor devices	2,759	77	49
Computer hardware	266	4	2
Photographic cameras and equipment	0	0	0
Photographic supplies	7	0	0
Exposed photographic plates, film, and paper	0	0	0
Medical goods	320,187	268,145	152,281
Optical goods	16	0	0
Surveying and navigational instruments	13	0	0
Balances of a sensitivity of 5 cgs or better	0	0	0
Drawing and mathematical calculating and measuring instruments	0	0	0
Watches	(¹)	0	0
Clocks and timing devices	(¹)	0	0
Measuring, testing, controlling and analyzing instruments	12,059	11,231	5,288
Total	634,578	451,689	275,478

See note(s) at end of table.

Table B-8--Continued

U.S. imports for consumption from the Dominican Republic, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	109,927	0	0
Grand total	4,444,617	2,805,634	1,765,856

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-9

U.S. imports for consumption from the Philippines, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	761,493	0	0
Forest products	102,819	58	(¹)
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	34,931	0	0
Other energy and chemical products	35,766	0	0
Total	70,697	0	0
Textiles, apparel, and footwear:			
Textiles and textile products	110,255	850	247
Medical apparel	1,617	0	0
Men's and boys' suits and sports coats	18,093	0	0
Men's and boys' coats and jackets	109,429	20	1
Men's and boys' trousers	138,443	4,036	47
Women's and girls' trousers	160,043	1,836	30
Shirts and blouses	502,237	18,818	304
Women's and girls' suits, skirts and coats	226,750	4,657	641
Women's and girls' dresses	131,825	3,259	125
Robes, nightwear, and underwear	87,468	1	(¹)
Hosiery	5,823	0	0
Foundation garments	40,160	13,644	6,340
Gloves including gloves for sports	73,088	3,938	496
Headwear	24,870	0	0
Other wearing apparel and accessories	276,980	12,875	465
Footwear and parts	81,537	1,488	33
Total	1,988,616	65,423	8,728
Minerals and metals:			
Steel mill products	5,352	0	0
Copper and related products	480	0	0
Aluminum mill products	49	42	4
Builders' hardware	1,755	0	0
Other metal products	102,944	389	351
Total	110,581	431	355
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	244,413	168	23
Jewelry	7,491	0	0
Motor vehicle and other furniture	227,103	0	0
Lamps and lighting fixtures	44,844	0	0
Other miscellaneous manufactured articles	97,603	22	4
Total	621,455	190	27
Machinery and equipment:			
Air conditioning equipment	2,721	0	0
Commercial machinery	236	0	0
Household appliances, including heating and drying equipment	321	4	4
Centrifuges, filtering and purifying equipment, and pumps for liquids	1,573	0	0
Semiconductor equipment, robots, and other equipment	1,495	0	0
Taps, cocks, valves, and similar devices	6,968	13	5
Electric motors, generators and related equipment	22,523	0	0
Electrical transformers, static converters, and inductors	35,359	0	0
Powered handtools and parts thereof	5	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	14,677	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	213,521	97,210	31,266
Miscellaneous machinery and equipment	1,812	3	1
Total	301,211	97,231	31,276

See note(s) at end of table.

Table B-9--Continued

U.S. imports for consumption from the Philippines, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	5,475	0	0
Motors and engines, except internal combustion, aircraft, or electric	165	0	0
Internal combustion piston engines, other than for aircraft	616	0	0
Construction and mining equipment	1,021	0	0
Forklift trucks and similar industrial vehicles	59	0	0
Ball and rollers bearings	4	0	0
Certain motor-vehicle parts	32,034	0	0
Primary cells and batteries, and electric storage batteries	4,384	0	0
Ignition starting, lighting, and other electrical equipment	463	0	0
Rail locomotive and rolling stock	1,139	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	9	0	0
Aircraft, spacecraft, and related equipment, except engines	5,262	874	437
Ships, tugs, pleasure boats, and similar vessels	0	0	0
Miscellaneous vehicles and transportation-related equipment	163	0	0
Motorcycles, mopeds, and parts	1,182	0	0
Total	51,975	874	437
Electronic products:			
Office machines	9,974	0	0
Telephone and telegraph apparatus	338,807	0	0
Optical fibers, optical fiber bundles and cables	2	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	33,933	12	8
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	504	0	0
Unrecorded magnetic tapes, discs, and other media	1,269	0	0
Records, tapes, compact discs, computer software, and other recorded media	3,017	8	(¹)
Radio navigational aid, radar, and remote control apparatus	1,587	0	0
Radio transmission and reception apparatus, and combinations thereof	136,293	436	96
Television receivers, video monitors, and combinations including television receivers	32,743	0	0
Television picture tubes and other cathode-ray tubes	0	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	28,630	0	0
Electric sound and visual signaling apparatus	85,156	0	0
Special-purpose tubes	51	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	25,078	1,786	855
Electrical capacitors and resistors	15,764	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	40,066	496	359
Semiconductor devices	3,884,488	2,025,034	1,077,145
Computer hardware	2,604,287	5,695	1,908
Photographic cameras and equipment	62,145	0	0
Photographic supplies	1	0	0
Exposed photographic plates, film, and paper	13	0	0
Medical goods	3,881	0	0
Optical goods	33,514	32	30
Surveying and navigational instruments	1,121	0	0
Balances of a sensitivity of 5 cgs or better	18	0	0
Drawing and mathematical calculating and measuring instruments	3	0	0
Watches	166,189	55,746	7,140
Clocks and timing devices	708	13	6
Measuring, testing, controlling and analyzing instruments	34,100	246	159
Total	7,543,344	2,089,506	1,087,706

See note(s) at end of table.

Table B-9--Continued

U.S. imports for consumption from the Philippines, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	322,646	0	0
Grand total	11,874,836	2,253,713	1,128,529

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-10
U.S. imports for consumption from Malaysia, total and under the production-sharing provisions (PSP) of
HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	247,947	0	0
Forest products	213,510	48	14
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	61,811	0	0
Other energy and chemical products	567,427	0	0
Total	629,238	0	0
Textiles, apparel, and footwear:			
Textiles and textile products	62,543	0	0
Medical apparel	1	0	0
Men's and boys' suits and sports coats	0	0	0
Men's and boys' coats and jackets	77,839	1,655	43
Men's and boys' trousers	81,811	1,207	18
Women's and girls' trousers	68,865	0	0
Shirts and blouses	292,998	14,632	932
Women's and girls' suits, skirts and coats	42,163	21	1
Women's and girls' dresses	34,047	41	4
Robes, nightwear, and underwear	28,505	209	4
Hosiery	38	0	0
Foundation garments	3,573	0	0
Gloves including gloves for sports	649,591	0	0
Headwear	2,945	0	0
Other wearing apparel and accessories	77,665	179	5
Footwear and parts	1,684	127	25
Total	1,424,267	18,071	1,033
Minerals and metals:			
Steel mill products	20,851	0	0
Copper and related products	18,630	0	0
Aluminum mill products	106	0	0
Builders' hardware	6,086	0	0
Other metal products	255,051	0	0
Total	300,724	0	0
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	15,093	0	0
Jewelry	11,288	24	22
Motor vehicle and other furniture	406,237	0	0
Lamps and lighting fixtures	20,619	0	0
Other miscellaneous manufactured articles	291,613	0	0
Total	744,850	24	22
Machinery and equipment:			
Air conditioning equipment	45,151	2,683	203
Commercial machinery	2,862	56	4
Household appliances, including heating and drying equipment	95,323	17,117	2,726
Centrifuges, filtering and purifying equipment, and pumps for liquids	1,963	0	0
Semiconductor equipment, robots, and other equipment	4,806	0	0
Taps, cocks, valves, and similar devices	2,593	0	0
Electric motors, generators and related equipment	19,695	812	358
Electrical transformers, static converters, and inductors	106,907	5,479	1,130
Powered handtools and parts thereof	4,006	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	2,006	101	54
Wiring harnesses for motor vehicles and other insulated electrical conduits	45,206	74	73
Miscellaneous machinery and equipment	18,634	40	1
Total	349,152	26,360	4,549

See note(s) at end of table.

Table B-10--Continued

U.S. imports for consumption from Malaysia, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	17,027	0	0
Motors and engines, except internal combustion, aircraft, or electric	6	0	0
Internal combustion piston engines, other than for aircraft	1,838	0	0
Construction and mining equipment	7,214	0	0
Forklift trucks and similar industrial vehicles	555	0	0
Ball and rollers bearings	9,337	0	0
Certain motor-vehicle parts	6,433	0	0
Primary cells and batteries, and electric storage batteries	39,797	0	0
Ignition starting, lighting, and other electrical equipment	7,362	0	0
Rail locomotive and rolling stock	2,924	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	0	0	0
Aircraft, spacecraft, and related equipment, except engines	2,014	162	80
Ships, tugs, pleasure boats, and similar vessels	8,060	7,439	1,341
Miscellaneous vehicles and transportation-related equipment	9,791	0	0
Motorcycles, mopeds, and parts	0	0	0
Total	112,357	7,601	1,421
Electronic products:			
Office machines	115,616	0	0
Telephone and telegraph apparatus	540,128	0	0
Optical fibers, optical fiber bundles and cables	1,265	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	168,011	0	0
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	1,075,858	0	0
Unrecorded magnetic tapes, discs, and other media	43,860	0	0
Records, tapes, compact discs, computer software, and other recorded media	93,067	0	0
Radio navigational aid, radar, and remote control apparatus	2,256	0	0
Radio transmission and reception apparatus, and combinations thereof	1,086,556	1,115	731
Television receivers, video monitors, and combinations including television receivers	239,805	0	0
Television picture tubes and other cathode-ray tubes	20,483	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	35,755	0	0
Electric sound and visual signaling apparatus	113,848	3,708	2,411
Special-purpose tubes	11	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	48,806	155	84
Electrical capacitors and resistors	21,413	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	188,553	5,389	2,066
Semiconductor devices	4,315,938	1,701,801	875,620
Computer hardware	6,146,132	50,914	24,424
Photographic cameras and equipment	138,012	0	0
Photographic supplies	153	0	0
Exposed photographic plates, film, and paper	40	0	0
Medical goods	35,466	1,437	1,285
Optical goods	3,907	0	0
Surveying and navigational instruments	1,341	0	0
Balances of a sensitivity of 5 cgs or better	0	0	0
Drawing and mathematical calculating and measuring instruments	2,991	0	0
Watches	24,417	0	0
Clocks and timing devices	2,216	0	0
Measuring, testing, controlling and analyzing instruments	49,327	14,024	1,493
Total	14,515,231	1,778,543	908,114

See note(s) at end of table.

Table B-10--Continued

U.S. imports for consumption from Malaysia, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	279,271	0	0
Grand total	18,816,546	1,830,646	915,153

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-11

U.S. imports for consumption from Korea, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	160,063	0	0
Forest products	279,683	11	(¹)
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	600,811	375	107
Other energy and chemical products	682,751	11	7
Total	1,283,561	386	114
Textiles, apparel, and footwear:			
Textiles and textile products	904,714	3,446	452
Medical apparel	2,031	0	0
Men's and boys' suits and sports coats	32,916	169	2
Men's and boys' coats and jackets	224,820	514	4
Men's and boys' trousers	51,257	65	1
Women's and girls' trousers	149,329	3,583	24
Shirts and blouses	727,300	2,279	29
Women's and girls' suits, skirts and coats	232,449	15,001	540
Women's and girls' dresses	79,206	5,863	188
Robes, nightwear, and underwear	32,306	0	0
Hosiery	54,380	0	0
Foundation garments	3,807	0	0
Gloves including gloves for sports	28,146	0	0
Headwear	76,247	0	0
Other wearing apparel and accessories	354,351	2,022	69
Footwear and parts	181,409	41,515	3,052
Total	3,134,667	74,454	4,361
Minerals and metals:			
Steel mill products	1,173,059	0	0
Copper and related products	38,987	0	0
Aluminum mill products	24,968	0	0
Builders' hardware	26,128	0	0
Other metal products	811,948	698	74
Total	2,075,090	698	74
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	159,654	5,657	84
Jewelry	174,909	1,169	636
Motor vehicle and other furniture	64,919	0	0
Lamps and lighting fixtures	21,893	0	0
Other miscellaneous manufactured articles	506,311	75	1
Total	927,686	6,901	720
Machinery and equipment:			
Air conditioning equipment	218,407	0	0
Commercial machinery	14,861	0	0
Household appliances, including heating and drying equipment	516,972	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	36,995	8,086	2,715
Semiconductor equipment, robots, and other equipment	49,374	0	0
Taps, cocks, valves, and similar devices	85,284	0	0
Electric motors, generators and related equipment	105,326	0	0
Electrical transformers, static converters and inductors	67,387	15	8
Powered handtools and parts thereof	4,055	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	69,010	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	16,808	11	1
Miscellaneous machinery and equipment	336,178	27,700	2,633
Total	1,520,657	35,813	5,357

See note(s) at end of table.

Table B-11--Continued

U.S. imports for consumption from Korea, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	70,956	0	0
Motors and engines, except internal combustion, aircraft, or electric	3,238	0	0
Internal combustion piston engines, other than for aircraft	31,007	0	0
Construction and mining equipment	297,477	23,136	3,614
Forklift trucks and similar industrial vehicles	110,703	0	0
Ball and rollers bearings	19,333	0	0
Certain motor-vehicle parts	174,012	14,967	7,881
Primary cells and batteries, and electric storage batteries	29,143	0	0
Ignition starting, lighting, and other electrical equipment	77,776	8,083	2,200
Rail locomotive and rolling stock	10,224	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	1,691,394	127,397	1,486
Aircraft, spacecraft, and related equipment, except engines	141,046	0	0
Ships, tugs, pleasure boats, and similar vessels	3,359	0	0
Miscellaneous vehicles and transportation-related equipment	28,380	0	0
Motorcycles, mopeds, and parts	4,692	86	77
Total	2,692,740	173,669	15,258
Electronic products:			
Office machines	85,481	0	0
Telephone and telegraph apparatus	747,506	1,402	1,086
Optical fibers, optical fiber bundles and cables	81	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	131,502	0	0
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	207,083	0	0
Unrecorded magnetic tapes, discs, and other media	190,051	0	0
Records, tapes, compact discs, computer software, and other recorded media	10,189	0	0
Radio navigational aid, radar, and remote control apparatus	10,518	6	5
Radio transmission and reception apparatus, and combinations thereof	291,034	0	0
Television receivers, video monitors, and combinations including television receivers	73,069	0	0
Television picture tubes and other cathode-ray tubes	7,197	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	108,685	550	52
Electric sound and visual signaling apparatus	89,066	0	0
Special-purpose tubes	4,471	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	17,595	12	3
Electrical capacitors and resistors	26,662	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	206,127	494	271
Semiconductor devices	5,248,460	1,303,784	757,302
Computer hardware	3,381,499	2,628	1,480
Photographic cameras and equipment	49,950	0	0
Photographic supplies	4,454	0	0
Exposed photographic plates, film, and paper	24,558	0	0
Medical goods	33,905	0	0
Optical goods	129,072	5	3
Surveying and navigational instruments	5,416	0	0
Balances of a sensitivity of 5 cgs or better	39	0	0
Drawing and mathematical calculating and measuring instruments	5,045	0	0
Watches	18,371	0	0
Clocks and timing devices	2,958	0	0
Measuring, testing, controlling and analyzing instruments	44,893	422	124
Total	11,154,937	1,309,302	760,325

See note(s) at end of table.

Table B-11--Continued

U.S. imports for consumption from Korea, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	471,834	0	0
Grand total	23,700,920	1,601,233	786,209

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-12
U.S. imports for consumption from Canada, total and under the production-sharing provisions (PSP) of
HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	9,784,066	69	59
Forest products	21,233,708	11,624	4,434
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	4,554,946	4,414	1,255
Other energy and chemical products	23,421,187	34,406	14,209
Total	27,976,133	38,820	15,464
Textiles, apparel, and footwear:			
Textiles and textile products	1,595,737	13,833	2,507
Medical apparel	45,131	0	0
Men's and boys' suits and sports coats	219,716	3,355	208
Men's and boys' coats and jackets	34,278	0	0
Men's and boys' trousers	118,949	223	150
Women's and girls' trousers	208,441	1	(¹)
Shirts and blouses	374,373	20,101	13,766
Women's and girls' suits, skirts and coats	109,704	33	14
Women's and girls' dresses	42,697	2	1
Robes, nightwear, and underwear	72,154	0	0
Hosiery	67,306	0	0
Foundation garments	7,936	2	1
Gloves including gloves for sports	22,319	0	0
Headwear	35,397	1	1
Other wearing apparel and accessories	242,363	261	129
Footwear and parts	100,403	54	47
Total	3,296,904	37,865	16,825
Minerals and metals:			
Steel mill products	2,511,981	21,495	16,223
Copper and related products	1,134,659	1,708	184
Aluminum mill products	1,074,176	4,230	3,000
Builders' hardware	88,799	248	155
Other metal products	12,272,123	27,573	19,976
Total	17,081,737	55,254	39,538
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	34,126	87	4
Jewelry	158,167	55	37
Motor vehicle and other furniture	4,026,393	253	161
Lamps and lighting fixtures	165,145	1,277	180
Other miscellaneous manufactured articles	887,630	3,458	575
Total	5,271,461	5,130	958
Machinery and equipment:			
Air conditioning equipment	351,391	9,185	2,804
Commercial machinery	292,884	9,985	2,294
Household appliances, including heating and drying equipment	451,852	6,099	1,338
Centrifuges, filtering and purifying equipment, and pumps for liquids	692,262	7,910	2,473
Semiconductor equipment, robots, and other equipment	244,910	1,564	562
Taps, cocks, valves, and similar devices	351,053	1,186	781
Electric motors, generators and related equipment	482,154	1,200	627
Electrical transformers, static converters, and inductors	370,082	28	19
Powered handtools and parts thereof	41,664	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	148,816	11,845	3,971
Wiring harnesses for motor vehicles and other insulated electrical conduits	527,440	997	471
Miscellaneous machinery and equipment	5,170,744	37,630	17,294
Total	9,125,252	87,629	32,635

See note(s) at end of table.

Table B-12--Continued

U.S. imports for consumption from Canada, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	1,396,025	1,656	375
Motors and engines, except internal combustion, aircraft, or electric	95,497	661	527
Internal combustion piston engines, other than for aircraft	3,303,125	8,425	7,812
Construction and mining equipment	526,586	4,454	965
Forklift trucks and similar industrial vehicles	398,809	113	47
Ball and rollers bearings	214,185	12	4
Certain motor-vehicle parts	7,576,068	40,957	16,943
Primary cells and batteries, and electric storage batteries	54,358	13,078	5,787
Ignition starting, lighting, and other electrical equipment	150,480	0	0
Rail locomotive and rolling stock	1,380,354	7,217	2,950
Automobiles, trucks, buses, and bodies and chassis of the foregoing	37,671,080	23,686	12,553
Aircraft, spacecraft, and related equipment, except engines	3,473,401	5,470	4,985
Ships, tugs, pleasure boats, and similar vessels	370,068	17,859	4,119
Miscellaneous vehicles and transportation-related equipment	539,325	17,490	6,472
Motorcycles, mopeds, and parts	7,483	0	0
Total	57,156,844	141,077	63,537
Electronic products:			
Office machines	222,574	50	38
Telephone and telegraph apparatus	2,063,798	185	80
Optical fibers, optical fiber bundles and cables	196,507	185	106
Microphones, loudspeakers, audio amplifiers, and combinations thereof	82,136	1,131	265
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	8,796	0	0
Unrecorded magnetic tapes, discs, and other media	18,391	0	0
Records, tapes, compact discs, computer software, and other recorded media	245,236	0	0
Radio navigational aid, radar, and remote control apparatus	179,729	21	20
Radio transmission and reception apparatus, and combinations thereof	994,926	1,022	820
Television receivers, video monitors, and combinations including television receivers	14,051	0	0
Television picture tubes and other cathode-ray tubes	6,207	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	93,598	0	0
Electric sound and visual signaling apparatus	189,170	122	34
Special-purpose tubes	8,995	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	265,915	887	215
Electrical capacitors and resistors	27,346	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	1,031,535	20,730	8,014
Semiconductor devices	2,259,924	9,562	6,059
Computer hardware	3,544,583	2,898	767
Photographic cameras and equipment	33,101	2	2
Photographic supplies	192,944	0	0
Exposed photographic plates, film, and paper	64,037	0	0
Medical goods	184,867	1,669	444
Optical goods	232,694	153	120
Surveying and navigational instruments	120,456	153	96
Balances of a sensitivity of 5 cgs or better	26	0	0
Drawing and mathematical calculating and measuring instruments	21,630	8,262	2,758
Watches	912	0	0
Clocks and timing devices	9,633	563	76
Measuring, testing, controlling and analyzing instruments	796,485	2,766	1,057
Total	13,110,202	50,361	20,970

See note(s) at end of table.

Table B-12--Continued

U.S. imports for consumption from Canada, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	10,649,152	0	0
Grand total	174,685,459	427,830	194,419

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-13

U.S. imports for consumption from the United Kingdom, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	1,133,503	0	0
Forest products	789,090	0	0
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	688,919	135	82
Other energy and chemical products	6,260,049	32,877	24,881
Total	6,948,968	33,012	24,963
Textiles, apparel, and footwear:			
Textiles and textile products	394,318	11	5
Medical apparel	15,346	0	0
Men's and boys' suits and sports coats	10,620	0	0
Men's and boys' coats and jackets	6,693	0	0
Men's and boys' trousers	12,027	0	0
Women's and girls' trousers	3,451	0	0
Shirts and blouses	64,668	12	8
Women's and girls' suits, skirts and coats	17,672	5	(¹)
Women's and girls' dresses	8,742	12	2
Robes, nightwear, and underwear	5,747	0	0
Hosiery	8,172	0	0
Foundation garments	3,907	622	161
Gloves including gloves for sports	7,500	0	0
Headwear	10,089	0	0
Other wearing apparel and accessories	100,440	41	(¹)
Footwear and parts	233,682	160	19
Total	903,075	863	195
Minerals and metals:			
Steel mill products	526,167	604	502
Copper and related products	58,521	0	0
Aluminum mill products	92,752	0	0
Builders' hardware	21,371	0	0
Other metal products	1,944,150	1,116	710
Total	2,642,961	1,720	1,212
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	8,405	8	5
Jewelry	41,493	49	43
Motor vehicle and other furniture	275,718	0	0
Lamps and lighting fixtures	22,041	0	0
Other miscellaneous manufactured articles	1,252,010	2,949	538
Total	1,599,665	3,006	586
Machinery and equipment:			
Air conditioning equipment	265,697	10,878	3,472
Commercial machinery	39,411	0	0
Household appliances, including heating and drying equipment	53,938	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	327,819	11,734	2,850
Semiconductor equipment, robots, and other equipment	146,626	2	2
Taps, cocks, valves, and similar devices	239,214	11	2
Electric motors, generators and related equipment	259,864	18,893	3,115
Electrical transformers, static converters, and inductors	114,017	346	150
Powered handtools and parts thereof	65,847	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	27,251	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	50,886	750	11
Miscellaneous machinery and equipment	1,990,407	65,343	11,473
Total	3,580,978	107,957	21,075

See note(s) at end of table.

Table B-13--Continued

U.S. imports for consumption from the United Kingdom, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	3,472,394	1,628	804
Motors and engines, except internal combustion, aircraft, or electric	81,539	0	0
Internal combustion piston engines, other than for aircraft	430,091	0	0
Construction and mining equipment	746,203	157,112	28,740
Forklift trucks and similar industrial vehicles	350,942	0	0
Ball and rollers bearings	82,421	66	1
Certain motor-vehicle parts	380,016	42,771	3,019
Primary cells and batteries, and electric storage batteries	33,074	0	0
Ignition starting, lighting, and other electrical equipment	107,749	147	55
Rail locomotive and rolling stock	13,461	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	1,836,460	948,436	18,131
Aircraft, spacecraft, and related equipment, except engines	1,322,475	347	314
Ships, tugs, pleasure boats, and similar vessels	104,070	28,319	3,923
Miscellaneous vehicles and transportation-related equipment	18,443	0	0
Motorcycles, mopeds, and parts	37,272	0	0
Total	9,016,607	1,178,827	54,986
Electronic products:			
Office machines	300,788	0	0
Telephone and telegraph apparatus	197,450	13	13
Optical fibers, optical fiber bundles and cables	13,794	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	76,091	0	0
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	28,201	0	0
Unrecorded magnetic tapes, discs, and other media	31,161	0	0
Records, tapes, compact discs, computer software, and other recorded media	130,175	0	0
Radio navigational aid, radar, and remote control apparatus	45,914	0	0
Radio transmission and reception apparatus, and combinations thereof	119,872	0	0
Television receivers, video monitors, and combinations including television receivers	18,526	0	0
Television picture tubes and other cathode-ray tubes	19,941	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	42,341	2,178	680
Electric sound and visual signaling apparatus	37,343	0	0
Special-purpose tubes	22,412	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	209,824	311	90
Electrical capacitors and resistors	24,756	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	344,388	1,712	450
Semiconductor devices	426,604	264	183
Computer hardware	1,587,628	192	33
Photographic cameras and equipment	88,125	7	6
Photographic supplies	160,377	29,393	13,983
Exposed photographic plates, film, and paper	5,417	0	0
Medical goods	306,511	200	181
Optical goods	103,280	18	17
Surveying and navigational instruments	196,765	0	0
Balances of a sensitivity of 5 cgs or better	276	0	0
Drawing and mathematical calculating and measuring instruments	10,626	0	0
Watches	3,133	3	3
Clocks and timing devices	7,895	0	0
Measuring, testing, controlling and analyzing instruments	969,552	8,887	894
Total	5,529,168	43,179	16,533

See note(s) at end of table.

Table B-13--Continued

U.S. imports for consumption from the United Kingdom, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	2,473,144	12,010	12,000
Grand total	34,617,159	1,380,574	131,549

¹Less than \$500.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-14

U.S. imports for consumption from Sweden, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Agricultural products	282,482	0	0
Forest products	243,299	0	0
Chemicals, coal, petroleum, natural gas, and related products:			
Fabricated plastic and rubber products	100,918	34	18
Other energy and chemical products	742,328	0	0
Total	843,245	34	18
Textiles, apparel, and footwear:			
Textiles and textile products	24,263	0	0
Medical apparel	1,667	0	0
Men's and boys' suits and sports coats	10	0	0
Men's and boys' coats and jackets	160	0	0
Men's and boys' trousers	183	0	0
Women's and girls' trousers	271	0	0
Shirts and blouses	1,004	0	0
Women's and girls' suits, skirts and coats	258	0	0
Women's and girls' dresses	428	0	0
Robes, nightwear, and underwear	686	0	0
Hosiery	394	0	0
Foundation garments	81	0	0
Gloves including gloves for sports	113	0	0
Headwear	6,779	0	0
Other wearing apparel and accessories	3,955	0	0
Footwear and parts	1,025	0	0
Total	41,276	0	0
Minerals and metals:			
Steel mill products	282,491	411	341
Copper and related products	52,164	0	0
Aluminum mill products	35,888	0	0
Builders' hardware	13,735	0	0
Other metal products	363,270	18	14
Total	747,547	429	355
Miscellaneous manufacturers:			
Luggage, handbags, and flat goods	203	0	0
Jewelry	143	0	0
Motor vehicle and other furniture	72,743	0	0
Lamps and lighting fixtures	4,648	0	0
Other miscellaneous manufactured articles	58,342	2,528	514
Total	136,080	2,528	514
Machinery and equipment:			
Air conditioning equipment	31,252	0	0
Commercial machinery	22,573	0	0
Household appliances, including heating and drying equipment	165,112	0	0
Centrifuges, filtering and purifying equipment, and pumps for liquids	113,056	70	28
Semiconductor equipment, robots, and other equipment	58,730	0	0
Taps, cocks, valves, and similar devices	37,841	0	0
Electric motors, generators and related equipment	39,396	0	0
Electrical transformers, static converters, and inductors	37,980	0	0
Powered handtools and parts thereof	117,128	0	0
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	494	0	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	24,607	0	0
Miscellaneous machinery and equipment	587,043	807	146
Total	1,235,212	878	174

See note(s) at end of table.

Table B-14--Continued

U.S. imports for consumption from Sweden, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Transportation equipment:			
Aircraft engines and gas turbines	108,267	0	0
Motors and engines, except internal combustion, aircraft, or electric	17,825	0	0
Internal combustion piston engines, other than for aircraft	127,553	0	0
Construction and mining equipment	321,033	27,656	279
Forklift trucks and similar industrial vehicles	27,458	0	0
Ball and rollers bearings	29,094	0	0
Certain motor-vehicle parts	182,941	7,549	923
Primary cells and batteries, and electric storage batteries	11,495	0	0
Ignition starting, lighting, and other electrical equipment	5,760	0	0
Rail locomotive and rolling stock	29,160	0	0
Automobiles, trucks, buses, and bodies and chassis of the foregoing	2,011,320	1,980,959	20,407
Aircraft, spacecraft, and related equipment, except engines	192,630	0	0
Ships, tugs, pleasure boats, and similar vessels	12,041	0	0
Miscellaneous vehicles and transportation-related equipment	10,398	0	0
Motorcycles, mopeds, and parts	2,225	0	0
Total	3,089,198	2,016,164	21,609
Electronic products:			
Office machines	22,719	0	0
Telephone and telegraph apparatus	61,326	0	0
Optical fibers, optical fiber bundles and cables	453	0	0
Microphones, loudspeakers, audio amplifiers, and combinations thereof	5,136	0	0
Tape recorders, tape players, video cassette recorders, turntables, and compact disc players	327	0	0
Unrecorded magnetic tapes, discs, and other media	351	0	0
Records, tapes, compact discs, computer software, and other recorded media	12,808	0	0
Radio navigational aid, radar, and remote control apparatus	6,880	0	0
Radio transmission and reception apparatus, and combinations thereof	190,438	0	0
Television receivers, video monitors, and combinations including television receivers	518	0	0
Television picture tubes and other cathode-ray tubes	0	0	0
Television apparatus (except receivers and monitors), including cameras camcorders and cable apparatus	1,254	0	0
Electric sound and visual signaling apparatus	2,562	0	0
Special-purpose tubes	26	0	0
Electrical and electronic articles, apparatus, and parts not elsewhere provided for	21,973	0	0
Electrical capacitors and resistors	14,404	0	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	77,701	0	0
Semiconductor devices	51,749	0	0
Computer hardware	74,801	0	0
Photographic cameras and equipment	13,601	196	193
Photographic supplies	2,191	0	0
Exposed photographic plates, film, and paper	106	0	0
Medical goods	106,344	0	0
Optical goods	17,325	0	0
Surveying and navigational instruments	16,197	0	0
Balances of a sensitivity of 5 cgs or better	42	0	0
Drawing and mathematical calculating and measuring instruments	416	0	0
Watches	148	0	0
Clocks and timing devices	270	0	0
Measuring, testing, controlling and analyzing instruments	108,989	2	1
Total	811,055	198	194

See note(s) at end of table.

Table B-14--Continued

U.S. imports for consumption from Sweden, total and under the production-sharing provisions (PSP) of HTS Chapter 98, by commodity groups, 1998

(Thousand dollars)

Commodity group	Total imports	Total under HTS PSP	U.S. content
Special provisions	391,260	0	0
Grand total	7,820,654	2,020,230	22,863

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-15**U.S. imports for consumption under HTS heading 9802.00.60, by country and commodity, 1998***(Thousand dollars)*

Monitoring group	Mexico	Canada	Japan	Germany	China	All other	Total
Steel mill products	38,505	18,576	0	0	0	2,425	59,506
Other metal products	3,603	13,525	4,394	12,033	10,227	2,739	46,521
Electrical transformers static converters and inductors . . .	31,913	0	0	0	0	471	32,384
Aircraft engines and gas turbines	22,669	25	0	0	36	1,693	24,423
Certain motor-vehicle parts . . .	36,832	838	0	0	0	0	37,670
All other	33,886	19,412	29,230	7,315	46	6,411	96,301
Total	167,409	52,376	33,625	19,347	10,310	13,739	296,805

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-16

U.S. imports for consumption under HTS heading 9802.00.90 from Mexico, by commodity, 1997 and 1998
(Thousand dollars)

Monitoring group	1997	1998
Textiles, apparel, and footwear:		
Textiles and textile products	116,992	103,745
Medical apparel	169,075	173,171
Men's and boys' suits and sports coats	4,498	4,476
Men's and boys' coats and jackets	24,523	45,911
Men's and boys' trousers	962,211	1,087,358
Women's and girls' trousers	805,093	941,445
Shirts and blouses	1,092,050	1,327,224
Women's and girls' suits, skirts and coats	88,189	113,456
Women's and girls' dresses	53,866	55,279
Robes, nightwear, and underwear	198,655	258,990
Hosiery	103,199	112,228
Foundation garments	88,948	76,140
Gloves including gloves for sports	9,479	7,551
Headwear	9,775	7,516
Other wearing apparel and accessories	118,874	137,689
Footwear and parts	0	168
Minerals and metals:		
Other metal products	0	4
Miscellaneous manufacturers:		
Luggage, handbags, and flat goods	75,210	91,118
Motor vehicle and other furniture	4,210	3,379
Machinery and equipment:		
Household appliances, including heating and drying equipment	0	3
Electrical transformers, static converters, and inductors	5	3
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	15	0
Wiring harnesses for motor vehicles and other insulated electrical conduits	0	122
Miscellaneous machinery and equipment	50	0
Transportation equipment:		
Certain motor-vehicle parts	46,606	870
Ignition starting, lighting, and other electrical equipment	0	3
Miscellaneous vehicles and transportation-related equipment	0	7
Electronic products:		
Microphones, loudspeakers, audio amplifiers, and combinations thereof	0	19
Electrical capacitors and resistors	2	0
Apparatus for making, breaking, protecting, or connecting electrical circuits	109	0
Medical goods	610	0
Surveying and navigational instruments	6	0
Total	3,972,250	4,547,873

Note:--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-17

Duty savings from use of the production-sharing provisions (PSP) of HTS Chapter 98, by monitoring group, 1998

Monitoring group	Total value	U.S. content	Percent dutiable	Nominal rate ¹	Effective rate ²	Duty savings
	————— Thousand dollars —————		————— Percent —————			Thousand dollars
Agricultural products	3,587	1,159	68	9	7	75
Forest products	130,676	74,998	43	3	1	2,248
Fabricated plastic and rubber products . . .	135,802	79,451	41	4	2	3,231
Other energy and chemical products	139,013	64,162	54	1	1	717
Textiles and textile products	367,665	201,151	45	6	3	12,023
Medical apparel	210,950	157,867	25	5	1	8,038
Men's and boys' suits and sports coats . . .	248,264	127,007	49	22	10	29,213
Men's and boys' coats and jackets	122,847	67,771	45	19	8	14,651
Men's and boys' trousers	2,513,376	1,399,633	44	19	8	280,052
Women's and girls' trousers	2,009,912	1,146,336	43	19	8	225,922
Shirts and blouses	3,422,385	2,368,814	31	23	7	558,407
Women's and girls' suits, skirts and coats	700,002	312,219	55	20	11	65,323
Women's and girls' dresses	261,426	103,299	60	15	9	15,507
Robes, nightwear, and underwear	1,940,921	1,292,569	33	14	4	185,655
Hosiery	338,752	303,484	10	16	2	47,793
Foundation garments	655,142	445,793	32	18	6	79,479
Gloves including gloves for sports	47,456	31,646	33	18	5	6,195
Headwear	30,369	19,764	35	6	2	1,157
Other wearing apparel and accessories . . .	648,451	405,893	37	16	5	66,698
Footwear and parts	1,598,482	219,325	86	14	11	38,803
Steel mill products	62,724	45,730	27	5	1	2,212
Copper and related products	16,149	7,336	55	2	1	107
Aluminum mill products	22,830	14,961	34	4	2	563
Builders' hardware	189,932	94,606	50	5	2	4,269
Other metal products	435,558	239,058	45	5	2	10,518
Luggage, handbags, and flat goods	173,566	82,036	53	16	8	13,818
Jewelry	88,822	68,150	23	8	2	5,330
Motor vehicle and other furniture	714,209	115,890	84	1	1	1,323
Lamps and lighting fixtures	134,221	94,831	29	7	2	6,725
Other miscellaneous manufactured articles	315,322	99,858	68	6	4	5,348
Air conditioning equipment	277,829	187,389	33	2	1	3,321
Commercial machinery	49,374	19,849	60	1	1	361
Household appliances, including heating and drying equipment	365,603	179,853	51	3	1	4,371
Centrifuges, filtering and purifying equipment, and pumps for liquids	128,044	71,063	45	1	1	711
Semiconductor equipment, robots, and other equipment	17,295	4,483	74	2	2	75
Taps, cocks, valves, and similar devices . .	606,300	430,570	29	3	1	11,756
Electric motors, generators and related						

See note(s) at end of table.

Table B-17--Continued

Duty savings from use of the production-sharing provisions (PSP) of HTS Chapter 98, by monitoring group, 1998

Monitoring group	Total value	U.S. content	Percent dutiable	Nominal rate ¹	Effective rate ²	Duty savings
	Thousand dollars		Percent			Thousand dollars
equipment	1,129,397	674,653	40	4	2	25,690
Electrical transformers, static converters, and inductors	817,201	419,334	49	3	1	12,180
Powered handtools and parts thereof	262,299	108,491	59	1	1	647
Flashlights and other similar electric lights, light bulbs, and fluorescent tubes; arc lights	155,307	93,478	40	3	1	2,582
Wiring harnesses for motor vehicles and other insulated electrical conduits	2,998,813	1,667,592	44	5	2	75,975
Miscellaneous machinery and equipment	680,620	187,132	73	2	2	3,513
Aircraft engines and gas turbines	59,080	45,364	23	2	1	1,149
Motors and engines, except internal combustion, aircraft, or electric	11,162	8,214	26	1	(³)	57
Internal combustion piston engines, other than for aircraft	170,186	52,546	69	2	1	1,013
Construction and mining equipment	457,781	74,331	84	1	1	613
Forklift trucks and similar industrial vehicles	165	52	68	0	0	0
Ball and rollers bearings	33,186	16,199	51	8	4	1,479
Certain motor-vehicle parts	1,612,101	959,836	40	3	1	24,950
Primary cells and batteries, and electric storage batteries	337,599	85,766	75	3	2	2,747
Ignition starting, lighting, and other electrical equipment	374,929	214,416	43	2	1	5,077
Rail locomotive and rolling stock	94,401	20,718	78	4	3	961
Automobiles, trucks, buses, and bodies and chassis of the foregoing	25,541,636	637,117	98	3	3	24,841
Aircraft, spacecraft, and related equipment, except engines	33,567	25,365	24	(³)	(³)	47
Ships, tugs, pleasure boats, and similar vessels	134,627	28,571	79	1	1	426
Miscellaneous vehicles and transportation- related equipment	156,563	77,846	50	1	(³)	491
Motorcycles, mopeds, and parts	286	219	23	1	(³)	2
Office machines	56,468	24,740	56	2	1	505
Telephone and telegraph apparatus	217,712	120,140	45	4	2	4,828
Optical fibers, optical fiber bundles and cables	13,878	9,321	33	4	1	400
Microphones, loudspeakers, audio amplifiers, and combinations thereof	276,180	81,955	70	5	3	4,016
Tape recorders, tape players, video cassette recorders, turntables, and compact						

See note(s) at end of table.

Table B-17--Continued

Duty savings from use of the production-sharing provisions (PSP) of HTS Chapter 98, by monitoring group, 1998

Monitoring group	Total value	U.S. content	Percent dutiable	Nominal rate ¹	Effective rate ²	Duty savings
	<i>Thousand dollars</i>	<i>Thousand dollars</i>	<i>Percent</i>	<i>Percent</i>		<i>Thousand dollars</i>
disc players	179,800	29,266	84	2	1	858
Unrecorded magnetic tapes, discs, and other media	31,009	10,422	66	1	(³)	44
Records, tapes, compact discs, computer software, and other recorded media	320	100	69	(³)	(³)	(⁴)
Radio navigational aid, radar, and remote control apparatus	69,334	23,918	66	3	2	668
Radio transmission and reception apparatus, and combinations thereof	1,035,941	137,583	87	2	2	3,090
Television receivers, video monitors, and combinations including television receivers	2,372,993	1,153,318	51	5	2	55,876
Television picture tubes and other cathode-ray tubes	54,287	17,269	68	2	1	185
Television apparatus (except receivers and monitors), including cameras, camcorders and cable apparatus	676,772	75,035	89	2	1	1,533
Electric sound and visual signaling apparatus	210,531	45,182	79	2	1	699
Special-purpose tubes	14,785	7,102	52	1	(³)	57
Electrical and electronic articles, apparatus, and parts not elsewhere provided for . . .	131,693	44,892	66	2	2	1,030
Electrical capacitors and resistors	343,075	236,185	31	4	1	10,432
Apparatus for making, breaking, protecting, or connecting electrical circuits	2,057,094	1,130,954	45	3	1	32,907
Semiconductor devices	8,408,106	4,534,253	46	(³)	(³)	10
Computer hardware	1,244,094	459,043	63	(³)	(³)	933
Photographic cameras and equipment	22,793	6,597	71	(³)	(³)	22
Photographic supplies	76,454	35,897	53	4	2	1,328
Medical goods	1,045,096	488,151	53	1	1	6,576
Optical goods	52,319	19,509	63	5	3	1,025
Surveying and navigational instruments . . .	50,798	22,086	57	2	1	484
Drawing and mathematical calculating and measuring instruments	122,094	6,095	95	3	3	219
Watches	56,764	7,350	87	7	6	508
Clocks and timing devices	80,545	51,444	36	9	3	4,619
Measuring, testing, controlling and analyzing instruments	970,427	447,539	54	2	1	9,090
Special provisions	12,041	12,019	(³)	0	0	0

See note(s) at end of table.

Table B-17--Continued

Duty savings from use of the production-sharing provisions (PSP) of HTS Chapter 98, by monitoring group, 1998

Monitoring group	Total value	U.S. content	Percent dutiable	Nominal rate ¹	Effective rate ²	Duty savings
	<i>Thousand dollars</i>	<i>Thousand dollars</i>	<i>Percent</i>	<i>Percent</i>		<i>Thousand dollars</i>
Total	74,067,561	25,212,611	66	6	3	2,038,375

¹Trade-weighted average rate of duty applicable to the products imported under HTS 9802.00.80 for each monitoring group. This is the rate that is applied to the dutiable portion of such imports.

²Trade-weighted average rate of duty after accounting for the duty-free U.S.-origin content of imports under provision 9802.00.80.

³Less than 0.5 percent.

⁴Less than \$500.

Note:--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-18

U.S. imports under the production-sharing provisions (PSP) of HTS Chapter 98 for all countries, by Standard Industrial Classification (SIC) code, 1997 and 1998

(Million dollars)

SIC code	Description	1997		1998	
		Total	U.S. content	Total	U.S. content
013	Field crops, except cash grains	(1)	(1)	0	0
016	Vegetables and melons	(1)	(1)	(1)	(1)
018	Horticultural specialties	1	1	1	(1)
021	Livestock, except dairy, poultry and animal specialties	0	0	(1)	(1)
027	Animal specialties	0	0	0	0
081	Timber tracts	(1)	(1)	0	0
083	Forestry products, nspf	0	0	0	0
106	Ferroalloy ores, nspf	0	0	0	0
132	Natural gas liquids	0	0	0	0
144	Sand and gravel	0	0	(1)	(1)
149	Nonmetallic minerals, nspf, except fuels . .	0	0	0	0
201	Meat products and meat packing products	0	0	0	0
203	Canned and preserved seafood, fruits, vegetables, jams, etc	(1)	(1)	(1)	(1)
204	Grain mill products	(1)	(1)	0	0
206	Sugar and confectionery products	0	0	(1)	(1)
207	Fats and oils	(1)	(1)	(1)	(1)
208	Beverages and flavoring extracts	0	0	0	0
209	Food preparations and related products, nspf	4	1	2	(1)
212	Cigars, cheroots, and cigarillos	0	0	0	0
221	Broad woven fabrics, cotton	(1)	(1)	1	1
222	Broad woven fabrics, manmade fibers and silk	(1)	(1)	(1)	(1)
223	Broad woven fabrics, wool	(1)	(1)	(1)	(1)
224	Narrow woven fabrics	9	4	8	3
225	Hosiery and knit fabrics	266	242	340	304
227	Floor coverings	6	5	1	1
228	Yarn and thread, textile fibers	(1)	(1)	(1)	(1)
229	Textile goods, nspf	37	21	48	26
231	Suits and coats, men's and boys', except raincoats	266	151	300	159
232	Shirts, nightwear, underwear, trousers, and work clothing, men's and boys'	5,336	3,478	6,056	3,885
233	Blouses, waists, dresses, suits, coats, and skirts, women's and misses' new, not knit or crocheted	1,783	986	1,922	1,060
234	Nightwear and underwear, women's, girls', childrens' and infants'; corsets and allied garments	1,340	884	1,428	937
235	Headwear, except rubber or plastic	22	13	21	13
236	Outerwear, nspf, textile fibers	2,456	1,492	2,904	1,725
237	Fur clothing and other articles made of furskins, nspf	(1)	(1)	(1)	(1)
238	Wearing apparel and accessories, nspf . . .	175	84	145	76
239	Fabricated textile articles, nspf	930	692	836	614
241	Logs, pulpwood, utility line poles, piling etc	0	0	0	0
242	Sawmill and planing mill products	(1)	(1)	0	0
243	Millwork, veneer, plywood, and structural wood products	31	10	19	10
244	Wooden containers	(1)	(1)	(1)	(1)
245	Wood buildings and mobile homes	1	(1)	(1)	(1)
249	Miscellaneous wood products	7	3	6	4
251	Household furniture	(1)	(1)	(1)	(1)
254	Partitions, shelving, lockers, and office and store fixtures	(1)	(1)	(1)	(1)
259	Venetian blinds and parts, iron, steel or aluminum; furniture, nspf	654	103	702	110
262	Paper mill products	(1)	(1)	(1)	(1)
265	Paperboard containers and boxes	(1)	(1)	(1)	(1)
267	Converted paper and paperboard products, except containers and boxes	15	10	10	6
272	Periodicals, unbound, except as waste . . .	0	0	0	0
273	Books and pamphlets	(1)	(1)	(1)	(1)
274	Miscellaneous publications	0	0	(1)	(1)
275	Commercial printed matter	21	19	16	13

See note(s) at end of table.

Table B-18--Continued

U.S. imports under the production-sharing provisions (PSP) of HTS Chapter 98 for all countries, by
Standard Industrial Classification (SIC) code, 1997 and 1998

(Million dollars)

SIC code	Description	1997		1998	
		Total	U.S. content	Total	U.S. content
276	Manifold business forms and interleaved carbon sets	0	0	0	0
277	Greeting cards	20	15	15	12
278	Blankbooks, loose leaf binders and devices	53	29	68	32
281	Industrial inorganic chemicals	5	3	(¹)	(¹)
282	Plastics materials and synthetic resins; synthetic rubber; synthetic and other manmade fibers, except glass	(¹)	(¹)	(¹)	(¹)
283	Drugs	34	27	35	27
284	Soaps, detergents, and cleaning preparations; perfumes, cosmetics, and other toilet preparations	86	31	73	24
285	Paints, varnishes, lacquers, and enamels	(¹)	(¹)	0	0
286	Industrial organic chemicals	3	2	3	2
287	Agricultural chemicals	0	0	(¹)	(¹)
289	Miscellaneous chemicals	13	5	13	5
291	Petroleum refinery products	(¹)	(¹)	0	0
295	Paving and roofing materials	0	0	0	0
299	Petroleum and coal products, nspf	0	0	(¹)	(¹)
301	Tires and inner tubes	(¹)	(¹)	(¹)	(¹)
302	Rubber and plastic footwear	731	40	526	33
305	Rubber and plastics hose and belting	36	15	30	14
306	Fabricated rubber products, nspf	43	26	48	27
308	Miscellaneous plastics products	111	55	80	48
311	Leather, tanned or finished	0	0	(¹)	(¹)
313	Prepared parts of footwear, all materials other than rubber, elastomer resin, metal, and asbestos	77	61	67	54
314	Footwear, except rubber and plastic	1,018	122	995	130
315	Leather gloves, except sport gloves	15	9	13	7
316	Luggage and related items	110	60	123	70
317	Handbags and other personal leather goods	33	16	50	12
319	Leather goods, nspf	1	1	1	1
321	Flat glass	(¹)	(¹)	0	0
322	Glass containers; pressed and blown glass and glassware	2	1	7	4
323	Products of purchased glass, nspf	25	13	27	14
325	Structural clay products	0	0	0	0
326	Pottery and related products	54	10	62	10
327	Concrete, gypsum and plaster products, and lime	0	0	0	0
328	Cut stone and stone products	(¹)	(¹)	0	0
329	Abrasive, asbestos, and miscellaneous nonmetallic mineral products	8	3	5	2
331	Blast furnace, steel works, rolling mill, and finishing mill products	218	167	74	52
332	Iron and steel products	1	(¹)	1	(¹)
333	Smelter and refined nonferrous metal	4	3	1	(¹)
335	Rolled, drawn, and extruded nonferrous metal	746	488	665	420
336	Nonferrous metal castings and forgings	2	1	3	1
339	Primary metal products, nspf	(¹)	(¹)	1	(¹)
341	Cans, used for transport of goods, of iron, steel, or aluminum	4	3	3	3
342	Cutlery, hand tools, and hardware, nspf	277	168	330	190
343	Heating equipment, except electric and warm air; and plumbing fixtures	23	13	24	14
344	Fabricated structural metal products	38	11	28	11
345	Bolts, nuts, screws, rivets, washers and similar articles of base metals	(¹)	(¹)	(¹)	(¹)
346	Metal forgings and stampings	(¹)	(¹)	1	1
348	Ordnance and accessories, except vehicles and guided missiles	5	1	7	1
349	Fabricated metal products, nspf	676	463	675	474
351	Engines and turbines, and parts and				

See note(s) at end of table.

Table B-18--Continued

U.S. imports under the production-sharing provisions (PSP) of HTS Chapter 98 for all countries, by
Standard Industrial Classification (SIC) code, 1997 and 1998
(Million dollars)

SIC code	Description	1997		1998	
		Total	U.S. content	Total	U.S. content
	accessories, nspf	130	65	119	58
352	Farm and garden machinery and equipment, and parts and attachments, nspf	52	28	64	40
353	Construction, mining, and materials handling machinery	695	172	691	148
354	Metalworking machines and equipment, and parts, accessories and attachments, nspf	501	133	472	116
355	Special industry machines and equipment, nspf, and parts, accessories and attachments, nspf	36	6	50	8
356	General industrial machines and equipment, nspf, and parts and attachments, nspf	422	212	316	177
357	Office, computing, and accounting machines, and parts and accessories, nspf	1,594	393	1,290	444
358	Refrigeration and service machinery, and parts and attachments, nspf	386	205	192	129
359	Flexible tubing and piping of base metal; and machine parts, nspf, nonelectric, nspf	27	8	34	20
361	Electric transmission and distribution equipment, and parts, nspf	418	242	448	246
362	Electrical industrial apparatus	1,408	801	1,774	993
363	Household appliances, and parts, nspf	679	279	496	231
364	Electric lighting and wiring equipment	1,230	721	1,083	629
365	Radio and tv receiving sets; phonographs; recorders; microphones; loudspeakers; audio amplifiers; & other audio equipment & accessories	3,560	1,162	3,552	1,328
366	Communication equipment and apparatus	874	269	1,218	271
367	Electronic components and accessories	10,425	5,495	10,259	5,490
369	Electrical machinery, apparatus, and parts, nspf	2,774	1,529	3,058	1,508
371	Motor vehicles and motor vehicle equipment, and parts, nspf	32,458	3,148	27,028	1,343
372	Aircraft and parts, nspf	228	54	48	33
373	Ship and boat building and repairing	112	24	135	29
374	Railroad equipment	331	108	94	20
375	Motorcycles, motor scooters, motorbikes, and cycles, not motorized, nspf, and parts, nspf	101	18	119	25
379	Miscellaneous transportation equipment, and parts, nspf	8	1	4	1
381	Aircraft flight, nautical & navigational, laboratory & scientific, geophysical, surveying & drafting instruments, & parts, nspf	96	36	110	41
382	Instruments for measuring, detecting, testing, and/or controlling nonelectric quantities, nspf, and parts & accessories, nspf	1,200	537	1,037	473
384	Surgical, medical, and dental instruments and supplies	1,140	659	1,089	557
385	Ophthalmic focus lenses, unmounted, including contact lenses; and spectacles, and parts, nspf	3	1	3	1
386	Photographic equipment and supplies	128	50	103	43
387	Watches, clocks, clockwork operated devices, and parts, nspf	6	2	63	9
391	Jewelry of precious metal; jewelry findings; precious and semiprecious stones, not set or strung; silverware and plated ware	52	47	75	58
393	Musical instruments, and parts and accessories, nspf	40	13	39	12
394	Toys and sporting, athletic, and gymnastic				

See note(s) at end of table.

Table B-18--Continued

U.S. imports under the production-sharing provisions (PSP) of HTS Chapter 98 for all countries, by Standard Industrial Classification (SIC) code, 1997 and 1998
(Million dollars)

SIC code	Description	1997		1998	
		Total	U.S. content	Total	U.S. content
395	goods, appliances, apparatus or accessories, nspf	139	35	86	24
396	Pens, pencils, and other office and stationery supplies, and artists' materials	38	24	43	25
399	Jewelry, nspf; buttons, needles, and miscellaneous notions	18	13	16	11
910	Brooms and brushes; linoleum and other floor coverings with a textile base; matches; candles, tapers and similar items	18	7	28	11
920	Scrap and waste	(¹)	(¹)	(¹)	(¹)
980	Used or second-hand merchandise	(¹)	(¹)	(¹)	(¹)
990	Goods imported from canada and returned to Canada without having been advanced in value or improved in condition or combined with other articles	5	4	12	12
	Special classification provisions, nspf	(¹)	(¹)	(¹)	(¹)
	Total	79,167	26,565	74,068	25,213

¹Less than \$500,000.

Note.--Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-19
Average hourly compensation costs for production workers in manufacturing, by selected regions and countries, 1995-98

Region/country	1995	1996	1997	1998	Change in 1998	Change in 1998	
					from 1995	from 1997	
				<i>U.S. dollars</i>		<i>Percentage</i>	
North America:							
United States	17.19	17.70	18.21	18.56	8	2	
Canada	16.10	16.64	16.46	15.69	-3	-5	
Mexico	1.51	1.54	1.78	1.83	21	3	
Europe:							
Germany	30.83	30.26	26.90	27.20	-12	1	
Switzerland	29.30	28.34	24.19	24.38	-17	1	
Norway	24.38	25.05	23.72	23.70	-3	(¹)	
Belgium	26.65	25.89	22.82	23.11	-13	1	
Denmark	24.07	24.11	22.03	22.69	-6	3	
Austria	25.31	24.80	21.91	22.16	-12	1	
Sweden	21.44	24.37	22.23	22.03	3	-1	
Finland	24.14	23.56	21.37	21.57	-11	1	
Netherlands	24.02	23.08	20.61	20.57	-14	(¹)	
France	20.01	19.93	17.99	18.28	-9	2	
Italy	16.22	17.75	17.57	17.11	5	-3	
United Kingdom	13.67	14.09	15.47	16.43	20	6	
Ireland	13.57	13.85	13.55	13.33	-2	-2	
Spain	12.88	13.51	12.24	12.14	-6	-1	
Greece	9.17	9.59	9.20	8.91	-3	-3	
Portugal	5.37	5.58	5.38	5.48	2	2	
Asia:							
Japan	23.82	20.91	19.37	18.05	-24	-7	
Singapore	7.33	8.32	8.24	7.77	6	-6	
Hong Kong ²	4.82	5.14	5.42	5.47	13	1	
Taiwan	5.92	5.93	5.87	5.24	-11	-11	
Korea	7.29	8.22	7.33	5.03	-31	-31	
Sri Lanka48	.48	.46	.47	-2	2	
Asian NIEs	6.40	6.91	6.67	5.72	-11	-14	

¹Less than 0.5 percent.

²Hong Kong Special Administrative Region of China.

Source: Compiled by the U.S. International Trade Commission from U.S. Department of Labor, Bureau of Labor Statistics international wage-rate comparison statistics. These data may be obtained at the BLS Web site (<http://stats.bls.gov/news.release/ichcc.t02.htm>).

APPENDIX C
U.S.-MEXICO TRADE: STATISTICS OF
THE GOVERNMENT OF MEXICO

Table C-1
U.S.-Mexico trade in 1998, by HS chapter

HS Description	Mexico's exports to the United States:				U.S. imports from Mexico: General
	Maqui- ladora	PITEX	Other	Total	
	-----Millions of U.S. dollars-----				
01 Live animals	0	0	212	212	208
02 Meat and edible offal	0	46	52	98	8
03 Fish and seafood	22	354	202	578	455
04 Dairy produce; eggs; honey; edible animal products	0	5	7	12	10
05 Other products of animal origin	13	6	2	21	29
06 Live trees & plants; cut flowers & ornamental foliage	0	11	25	36	38
07 Edible vegetables and certain roots and tubers	56	1,265	637	1,958	1,629
08 Edible fruit and nuts; peel of citrus fruit or melons	0	335	326	661	749
09 Coffee, tea, mate and spices	0	238	290	529	501
10 Cereals	0	1	35	36	6
11 Milling products; malt; starches; inulin; wheat gluten	0	2	4	7	4
12 Oil seeds & oleaginous fruits; misc. grains, seeds, & fruits; industrial or medicinal plants; straw & fodder	0	4	46	50	37
13 Lac; gums; resins & other vegetable saps & extracts	1	8	5	14	14
14 Vegetable plaiting materials & veg. products, nesoi	0	3	24	27	22
15 Animal or vegetable fats, oils, & waxes; edible fats	2	2	43	46	46
16 Edible preparations of meat, fish, or seafood	12	19	26	58	32
17 Sugars and sugar confectionery	29	87	161	277	156
18 Cocoa and cocoa preparations	1	10	22	33	35
19 Preparations of cereals, flour, starch, or milk	11	72	58	141	149
20 Preparations of vegetables, fruit, nuts, parts of plants	34	64	189	286	269
21 Miscellaneous edible preparations	9	67	68	144	107
22 Beverages, spirits, and vinegar	1	598	215	815	805
23 Residues, waste of the food industries; animal feed	0	2	9	10	6
24 Tobacco and manufactured tobacco substitutes	0	22	23	45	40
25 Salt; sulfur; earths & stone; plaster, lime, and cement	0	6	190	197	159
26 Ores, slag and ash	0	53	38	92	119
27 Mineral fuels, oils, waxes; bituminous substances	0	2	5,543	5,545	5,309
28 Inorganic chemicals; compounds of precious metals, rare- earth metals, or radioactive elements or isotopes	24	98	130	252	223
29 Organic chemicals	7	192	125	324	359
30 Pharmaceutical products	124	7	21	152	25
31 Fertilizers	0	96	44	140	25
32 Tanning or dyeing extracts; tannins; dyes, pigments, other coloring matter; paints & varnishes; putty; inks	114	26	29	169	64
33 Essential oils; perfume; cosmetic/ toilet preparations	41	5	94	140	87
34 Soap; lubricating products; waxes; polishing/scouring products; candles; modeling pastes; dental plaster	9	79	118	206	198
35 Albumoidal substances; starches; glues; enzymes	9	2	11	21	10
36 Explosives; fireworks; matches; combustible prep	8	0	3	11	14
37 Photographic or cinematographic goods	2	197	11	210	160
38 Miscellaneous chemical products	72	128	50	250	160
39 Plastics and articles thereof	1,152	429	197	1,778	940
40 Rubber and articles thereof	186	274	61	521	400

Table C-1--Continued
U.S.-Mexico trade in 1998, by HS chapter

HS Description	Mexico's exports to the United States:				U.S. imports from Mexico: General
	Maqui- ladora	PITEX	Other	Total	
	-----Millions of U.S. dollars-----				
41 Raw hides and skins (other than furskins) and leather	106	72	12	189	72
42 Leather articles; saddlery; travel goods; handbags	203	45	31	280	223
43 Furskins and artificial fur; manufactures thereof	4	0	0	5	4
44 Wood and articles of wood; wood charcoal	189	107	194	490	407
45 Cork and articles of cork	1	0	1	2	2
46 Manufactures of straw; basketware and wickerwork	0	0	1	2	2
47 Wood pulp; waste and scrap paper and paperboard	23	0	3	27	6
48 Paper & paperboard; articles of pulp, paper, paperbd	363	120	184	667	433
49 Printed products, including books, newspapers, plans	168	14	27	209	150
50 Silk, including yarns and woven fabrics thereof	0	0	0	0	0
51 Wool & animal hair, yarns & woven fabrics thereof	0	4	20	24	20
52 Cotton, including yarns and woven fabrics thereof	43	158	126	327	241
53 Other vegetable textile fibers; yarns and fabrics of such vegetable fibers and paper	1	0	1	2	3
54 Manmade filaments, including yarns & woven fabrics	26	60	94	180	136
55 Manmade staple fibers, incl. yarns & woven fabrics	20	78	98	197	103
56 Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	16	54	16	86	93
57 Carpets and other textile floor coverings	14	23	3	41	15
58 Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	95	14	11	120	31
59 Impregnated, coated, covered or laminated textile fabrics; textile articles suitable for industrial use	19	9	5	33	39
60 Knitted or crocheted fabrics	0	52	8	60	50
61 Knitted or crocheted apparel	1,523	560	160	2,242	2,819
62 Woven apparel	2,867	907	94	3,867	3,884
63 Other textile articles; needlecraft; used clothing	598	109	73	779	525
64 Footwear and parts	156	125	94	374	347
65 Headgear and parts	35	6	6	47	50
66 Umbrellas, walking sticks, whips, and riding crops	4	0	0	4	1
67 Articles of feathers and down; artificial flowers; articles of human hair	1	2	1	4	4
68 Articles of stone, plaster, cement, asbestos, or mica	71	39	100	210	202
69 Ceramic products	65	213	149	427	375
70 Glass and glassware	215	435	79	729	606
71 Natural or cultured pearls; precious or semiprecious stones; precious-metal and imitation jewelry; coin	162	407	264	833	578
72 Iron and steel	143	924	75	1,142	1,056
73 Articles of iron or steel	562	1,018	232	1,812	1,216
74 Copper and articles thereof	77	103	560	741	660
75 Nickel and articles thereof	1	0	0	2	1
76 Aluminum and articles thereof	226	84	93	403	320
78 Lead and articles thereof	0	31	5	36	35
79 Zinc and articles thereof	14	38	52	103	126
80 Tin and articles thereof	0	0	1	1	3

Table C-1--Continued
U.S.-Mexico trade in 1998, by HS chapter

HS Description	Mexico's exports to the United States:				U.S. imports from Mexico: General
	Maqui-ladora	PITEX	Other	Total	
-----Millions of U.S. dollars-----					
81 Other articles of base metals; cermets & articles of	1	10	3	13	10
82 Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	157	75	18	250	134
83 Miscellaneous articles of base metal	503	89	55	647	485
84 Machinery and mechanical appliances, including nuclear reactors, boilers, computer hardware, & parts	5,945	6,181	678	12,804	11,629
85 Electrical machinery & equipment; sound recorders & reproducers; television equip.; parts & accessories	27,007	3,354	292	30,653	25,783
86 Railway locomotives, rolling stock, track fixtures and parts; traffic signaling equipment	146	162	7	315	315
87 Other vehicles, incl. automobiles, trucks, buses, parts	2,728	14,762	154	17,645	16,735
88 Aircraft, spacecraft, and parts thereof	805	57	50	912	49
89 Ships, boats and floating structures	1	25	2	29	2
90 Optical, photographic, cinematographic, measuring, checking, precision, or medical instruments, & parts	2,229	805	110	3,144	3,325
91 Clocks and watches and parts thereof	29	5	2	36	82
92 Musical instruments; parts and accessories thereof	71	0	1	73	56
93 Arms and ammunition; parts and accessories thereof	5	2	0	8	12
94 Furniture; bedding, mattresses, & cushions; lamps & lighting fittings; illuminated signs; prefab buildings	1,463	537	222	2,222	2,698
95 Toys, games & sports equip.; parts & accessories	826	82	24	933	845
96 Miscellaneous manufactured articles	232	77	23	332	200
97 Works of art, collectors' pieces and antiques	0	0	7	7	24
Total	50,161	32,035	4,523	86,720	77,225
Other (see note)	0	1	50	51	3,876
Grand total	52,100	36,851	13,920	102,872	94,708

Note.-- "Other" exports from Mexico consist primarily of goods imported into Mexico for repair and re-exported, shipping containers, and other temporary imports, such as samples and models, that are re-exported. The leading types of goods imported into the United States from Mexico under HTS chapters 98 and 99 that are not otherwise classified in HS chapters 1-97 (shown here as "Other") are low value imports, including the value of repairs made to vehicles, vessels, and aircraft; shipping containers; personal exemptions; importations of U.S. and foreign governments and international organizations; and importations of religious, educational, scientific, and other institutions.

Source: Mexico's exports to the United States were compiled from "World Trade Atlas: Mexico Edition, Annual Summary 1993-1998," which used data supplied by INEGI, the statistical agency of the Government of Mexico. U.S. imports from Mexico were compiled from official statistics of the U.S. Department of Commerce.

Table C-2
Mexico's exports to the United States¹ under Temporary Import Programs (Maquiladora and PITEX), by leading product sectors, 1996-98

Product sectors (HS range)	Exports under Temporary Import Programs (TIP)			Total exports to the U.S. in 1998	TIP share of total exports to the U.S. in 1998
	1996	1997	1998		
	<i>Million dollars</i>				<i>Percentage</i>
Motor Vehicle ²	11,194	12,077	13,615	13,641	100
Certain motor-vehicle parts ²	10,154	11,552	11,953	12,185	98
Apparel and other textile articles (61-63,65)	3,626	5,538	6,602	6,935	95
Color television receivers and parts (8528.12, 8529.90, 8540.11, 8540.91)	4,637	5,260	6,317	6,325	100
Radio transmission and reception apparatus (8525, 8527, and 8529 (pt))	3,170	3,767	3,929	3,954	99
Computers and components (8471)	2,039	3,097	3,770	3,885	97
Electrical circuit apparatus (8534, 8535, 8536, 8537, 8538)	2,240	2,473	2,786	2,821	99
Measuring, testing, and controlling instruments (9024, 9025, 9027, 9028, 9029, 9030, 9031, 9032, 9033 (pt))	452	799	1,080	1,134	95
Major household appliances (8418, 8422.11, 8422.19, 8450, 8451)	298	306	366	413	89
All other	23,830	31,519	38,534	51,579	75
Total	61,640	76,388	88,952	102,872	86

¹ Official Mexican statistics on Mexico's exports to the United States in 1998 were valued 11 percent larger than official U.S. statistics on U.S. imports from Mexico. Much of the difference in the reported trade levels can be attributed to maquiladora shipments to U.S. distribution centers that are later re-exported to global markets. Significant discrepancies between U.S. and Mexican data on an individual product basis can be caused by differences in classification.

² The products covered in the "certain motor-vehicle parts" sector include body stampings, engines and parts, bumpers, brakes and parts, gear boxes, axles, wheels, shock absorbers, radiators, exhaust systems, clutches, steering wheels, wiring harnesses, car seats and parts, and miscellaneous parts and accessories; these products include HS numbers 8407, 8408, 8409, 8544.30, 8708, 9401.20. This definition is consistent with the definition of "certain motor-vehicle parts" used elsewhere in the body of this report. See "Motor Vehicles and Parts" in chapter 3 of this report. In the tables in app. B, however, the category "certain motor-vehicle parts" does not include engines, wiring harnesses, or seats and parts.

³ Covers HS numbers 8701.20, 8702, 8703.22 to 8703.90, 8704.21 to 8704.90, 8706.00.03, 8706.00.05, 8706.00.15.20, 8707.10.00.20, 8707.90.50.20, 8707.90.50.40, and 8707.90.50.60.

Source: Compiled from "World Trade Atlas: Mexico Edition, Annual Summary 1993 to 1998," which used data provided by INEGI, the statistical agency of the Government of Mexico.

Table C-3**Total imports into Mexico under Temporary Import Programs (Maquiladora and PITEX), by leading sources, 1995-98**

Sources	1995	1996	1997	1998	Percentage of total in 1998
	----- <i>Millions dollars</i> -----				
United States	34,127	41,891	49,764	56,867	82
Japan	2,510	2,507	2,357	2,288	3
Germany	1,100	1,227	1,516	1,921	3
Korea	430	742	1,151	1,229	2
Taiwan	330	431	495	793	1
Canada	365	582	738	663	1
China	244	289	462	620	1
Malaysia	274	328	404	538	1
France	248	250	269	373	1
Singapore	183	230	237	287	(¹)
All Other	1,600	1,936	3,120	3,437	4
Total	41,411	50,413	60,513	69,016	100

¹ Less than 1 percent

Source: Compiled from "World Trade Atlas: Mexico Edition, Annual Summary, 1993 to 1998," which used data provided by INEGI, the statistical agency of the Government of Mexico.